Instituto de Pesquisas Jardim Botânico do Rio de Janeiro

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Dissertação de mestrado

Melastomataceae no Parque Natural Municipal de São Lourenço, Santa Teresa, Espírito Santo, Brasil.

Pedro Martin Lischinsky Alves dos Santos

Rio de Janeiro

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Dissertação apresentada ao Programa de Pós-Graduação em Botânica, Escola Nacional de Botânica Tropical, do Instituto de Pesquisas Jardim Botânico do Rio de Janeiro, como parte dos requisitos necessários para a obtenção do título de Mestre em Botânica.

Orientador: Claudio Nicoletti de Fraga
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Resumo

Trabalhos recentes de florística em Unidades de Conservação do Espírito Santo evidenciaram uma grande riqueza de espécies de Melastomataceae nestas áreas. O presente estudo consiste em um levantamento florístico da família no Parque Natural Municipal de São Lourenço, assim como uma chave de identificação, descrições morfológicas, comentários sobre distribuição, habitat, fenologia e grau de ameaça, além de fotografias e ilustrações das espécies. Foram realizadas expedições durante os anos de 2019 e 2020 para a coleta de espécimes botânicos, além da consulta de amostras depositadas nos herbários FLOR, HUEFS, MBM, MBML, NY, RB, UPCB, US e VIES. A família apresentou 10 gêneros e 56 espécies na região, com *Miconia* possuindo 42 espécies, *Pleroma* 6 e os gêneros *Aciotis*, *Acisanthera*, *Bertolonia*, *Chaetogastra*, *Henriettea*, *Meriania*, *Microlicia* and *Mouriri* representados por apenas uma espécie cada.

Palavras-chave: Florística, Mata Atlântica, Melastomataceae, Santa Teresa, Taxonomia.

Abstract

Recent floristic studies of Conservation Units in Espírito Santo have shown a great richness of Melastomataceae. The present work consists of a floristic survey of Melastomataceae in the Municipal Natural Park of São Lourenço, as well as identification keys, morphological descriptions, comments on distribution, habitat, phenology and conservation status, photographs and illustrations of the species. A thorough sampling was based on several expeditions during 2019 and 2020; in addition, we analyzed all specimens collected in the area and deposited in the herbaria FLOR, HUEFS, MBM, MBML, NY, RB, UPCB, US and VIES. The family presented 10 genera and 56 species in the region, with *Miconia* having 42 species, *Pleroma* 6 and the genera *Aciotis*, *Acisanthera*, *Bertolonia*, *Chaetogastra*, *Henriettea*, *Meriania*, *Microlicia* and *Mouriri* represented by only one species each.

Key words: Atlantic Forest, Floristics, Melastomataceae, Santa Teresa, taxonomy.

Introdução geral

Melastomataceae A. Juss. é uma família pantropical que contém cerca de 5750 espécies divididas em cerca de 177 gêneros e 18 tribos (Michelangeli *et al.* 2020). Seus representantes podem ser reconhecidos principalmente pela presença de folhas simples, decussadas com nervação acródroma e pelos estames com conectivo frequentemente prolongado e anteras poricidas. Suas espécies estão distribuídas na região tropical e subtropical do globo, porém com notável maior diversidade concentrada no novo mundo (Clausing & Renner 2001). Com cerca de 1436 espécies e 69 gêneros no Brasil (Goldenberg *et al.* 2020), é a quinta família com maior riqueza de espécies (BFG 2015), possuindo representantes em todos os estados do país e em todos os domínios fitogeográficos, sendo mais comuns na Amazônia, Mata Atlântica e Cerrado (Goldenberg *et al*. 2020).

A família foi descrita originalmente por Jussieu no livro Genera Plantarum (1789) com base nos gêneros *Blakea* P. Browne, *Maieta* Aubl., *Melastoma* L., *Osbeckia* L., *Rhexia* L., *Tococa* Aubl., *Topobea* Aubl., *Tibouchina* Aubl. e *Tristemma* Juss. As principais obras históricas que servem como base para o conhecimento taxonômico sobre Melastomataceae são as descrições publicadas por de Candolle (1828) e Naudin (1845; 1849-1853), e as revisões de Triana (1872) e Cogniaux (1891), sendo que a última representa a última revisão abrangente para todo o grupo.

Para as espécies do Brasil o estudo taxonômico mais abrangente sobre a família também foi produzido por Cogniaux para a Flora Brasiliensis (1884-1888). Outros trabalhos taxonômicos importantes para a identificação de espécies são os de Hoehne (1922), as floras estaduais de Santa Catarina (Wurdack 1962) e São Paulo (Martins *et al*. 2009), uma chave de identificação para os gêneros do Brasil (Goldenberg *et al*. 2012), monografias contendo descrições, chaves de identificação e ilustrações realizadas para o projeto Flora do Brasil (2020), diversas revisões de tribos, gêneros, e seções, além de trabalhos regionais de florística.

Melastomataceae é monofilética, com bom suporte morfológico e molecular; a única questão mais relevante a respeito de sua classificação se refere a elevar a subfamília Memecyloideae ao *status* de família (Renner 1993; Clausing & Renner 2001). Embora a filogenia molecular prove que Melastomataceae e Memecylaceae formam grupos monofiléticos (Clausing & Renner 2001), tal separação não é adotada atualmente, com apenas uma família reconhecida e duas subfamílias: Olisbeoideae e Melastomatoideae (APG 2016).

Na classificação proposta por Cogniaux (1891), a família é dividida em três subfamílias: Astronioideae Triana, Melastomatoideae Naudin e Memecyloideae Naudin, e distribuída em 13 tribos, sendo 11 delas pertencentes à subfamília Melastomatoideae. Com o passar dos anos, no entanto, tal classificação tornou-se desatualizada, afinal vários novos táxons foram descritos, assim como novas ferramentas se tornaram disponíveis para melhor compreender as relações evolutivas entre os grupos. Diversas mudanças na classificação infrafamiliar de Melastomataceae vêm ocorrendo molecular decorrentes da utilização de evidências moleculares na sistemática, com tribos, gêneros e outros clados sendo recircunscritos, como as tribos Bertolonieae (Bacci et al. 2019), Miconieae (Michelangeli *et al*. 2019) e o clado *Tibouchina* Aubl. e aliados (Guimarães *et al*. 2019), ou descritos, como as tribos Henrietteeae (Penneys *et al*. 2010), Marcetieae (Rocha *et al*. 2017), Trioleneae (Bacci et al. 2019), Cambessedesieae (Bochorny et al. 2019), Lithobieae e Eriocnemeae (Penneys *et al.* 2020).

Uma considerável parte das espécies nativas do Brasil ocorrem em regiões restritas, o que faz com que a família apresente diversas espécies endêmicas (Martins 1984). A Mata Atlântica abriga uma grande diversidade de Melastomataceae, com cerca de 544 espécies, das quais aproximadamente 386 são endêmicas (Goldenberg *et al.* 2020). Apesar de ser o bioma onde há um maior número de pesquisas desenvolvidas para a família, ainda existe uma lacuna de conhecimento em algumas regiões da Mata Atlântica (Goldenberg *et al*. 2012). Tendo em vista o intenso processo de degradação que o bioma vem sofrendo, restando apenas 13,1 % de sua cobertura original (SOS Mata Atlântica & INPE 2019), a alta diversidade de espécies e um alto índice de endemismo, é urgente conhecer melhor as espécies que ocorrem na Mata Atlântica, a fim de encontrar estratégias e ferramentas adequadas visando sua conservação. Neste contexto, trabalhos florísticos são relevantes para melhor compreender a distribuição e evolução das Melastomataceae.

Melastomataceae é a sétima família em número de espécies no Espírito Santo (Dutra *et al.* 2015) com cerca 200 espécies em 21 gêneros, das quais 51 são endêmicas (Goldenberg *et al.* 2020). Para o estado, além da flora dos gêneros *Miconia* Ruiz & Pav. (Bacci *et al.* 2016) *Bertolonia* Spreng. (Bacci *et al.* 2017) e Cambessedesieae (Bochorny & Goldenberg 2017) foram realizados estudos florísticos na Área de Proteção Ambiental Mestre Álvaro (APAMA) (Iglesias & Dutra 2017), no Parque Estadual do Forno Grande (PEFG) (Meirelles & Goldenberg 2012) e na Estação Biológica Santa Lúcia (EBSL) (Goldenberg & Reginato 2006), onde foram encontradas 26, 39 e 57 espécies respectivamente. No mesmo município da EBSL, Santa Teresa, está também localizada a área de estudo deste trabalho, o Parque Natural Municipal de São Lourenço (PNMSL).

O município de Santa Teresa destaca-se no Espírito Santo pela impressionante diversidade de espécies arbóreas, o que foi evidenciado por um estudo realizado por Thomaz & Monteiro (1997), bem como uma elevada riqueza em diversos grupos taxonômicos. O município também é referência em termos de conservação, o que se deve em grande parte ao empenho de Augusto Ruschi, um dos pioneiros do pensamento conservacionista no Brasil e responsável pela proteção de diversos fragmentos florestais em Santa Teresa (Fraga *et al.* 2019).

Atualmente Santa Teresa possui 4 UCs em ótimo estado de conservação: a Reserva Biológica Augusto Ruschi (REBIO Augusto Ruschi), a EBSL, a Área de Proteção Ambiental de Goiapaba-Açú e o PNMSL. A conexão entre essas áreas torna a região uma parte importante do corredor ecológico central da Mata Atlântica que se estende por todo o estado (Fonseca *et al*. 2004). Vale destacar o papel do Instituto Nacional da Mata Atlântica (INMA), antigo Museu de Biologia Mello Leitão, na conservação das florestas do município, desenvolvendo diversos projetos de pesquisa e ações na conservação da flora, além de também ser responsável pela administração de Unidades de Conservação no município, como a EBSL (Garbin *et al*. 2017) e a Reserva Biológica da Caixa d'Água, uma área de 22 ha. inserida no PNMSL.

Localizado na região centro-sul do município, contíguo à zona urbana do município, o PNMSL abriga áreas florestais em bom estado de conservação com diversos cursos d'água de interesse público que deságuam na bacia hidrográfica dos Reis Magos, com destaque para o córrego Valão de São Lourenço (Mota *et al.* 2009). Coletas realizadas anteriormente no PNMSL e em áreas adjacentes, bem como o estudo florístico para EBSL, mostram uma alta riqueza de espécies de Melastomataceae na região. Na listagem de espécies realizada para a área, presente no plano de manejo do PNMSL, foram levantadas 37 espécies de Melastomataceae, com algumas identificações incertas e nove delas identificadas apenas a nível de gênero. O objetivo deste estudo é apresentar um tratamento taxonômico para a família Melastomataceae do PNMSL, contendo uma chave de identificação, descrições, fotografias, ilustrações, assim como comentários fenológicos e ecológicos para auxiliar no reconhecimento das espécies e ampliar o conhecimento sobre as mesmas.

Melastomataceae of the Parque Natural Municipal de São Lourenço, Espírito Santo, Brazil.

Melastomataceae no Parque Natural Municipal de São Lourenço, Espírito Santo, Brasil.

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Melastomataceae in Santa Teresa, ES.

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Abstract

The Atlantic Forest is one of the diversity centers of Melastomataceae in the world, and studies have been showing the great richness of its species in Espírito Santo, a state that once was entirely covered by this phytogeographic domain. We present here a floristic survey of the species of Melastomataceae in a protected area in this state, the Municipal Natural Park of São Lourenço. We also present an identification key for the species, detailed descriptions, comments on distribution, habitat and phenology, photographs and illustrations. A thorough sampling was based on several expeditions during 2019 and 2020; in addition, we analyzed all specimens collected in the area and deposited in the herbaria FLOR, HUEFS, MBM, MBML, NY, RB, UPCB, US and VIES. The family has 10 genera and 56 species in the area, with *Miconia* having 42 species, *Pleroma* 6 and the genera *Aciotis*, *Acisanthera*, *Bertolonia*, *Chaetogastra*, *Henriettea*, *Meriania*, *Microlicia* and *Mouriri* represented by only one species each.

Key words: Atlantic Forest, Floristics, Melastomataceae, Santa Teresa, taxonomy.

Resumo

A Mata Atlântica é um dos centros de diversidade de Melastomataceae no mundo, e estudos têm mostrado uma grande riqueza de espécies no Espírito Santo, estado que já foi inteiramente coberto por esse domínio fitogeográfico. Este trabalho apresenta um levantamento florístico das espécies de Melastomataceae no Parque Natural Municipal de São Lourenço, assim como uma chave de identificação para as espécies, descrições detalhadas, comentários sobre distribuição, habitat e fenologia, além de fotografias e ilustrações. Foram realizadas expedições durante os anos de 2019 e 2020 para a coleta de espécimes botânicos, além da consulta de amostras previamente depositadas nos herbários FLOR, HUEFS, MBM, MBML, NY, RB, UPCB, US e VIES. A família apresentou 10 gêneros e 56 espécies na região, com *Miconia* possuindo 42 espécies, *Pleroma* 6 e os gêneros *Aciotis*, *Acisanthera*, *Bertolonia*, *Chaetogastra*, *Henriettea*, *Meriania*, *Microlicia* e *Mouriri* representados por apenas uma espécie cada.

Palavras-chave: Florística, Mata Atlântica, Melastomataceae, Santa Teresa, Taxonomia.

Introduction

Melastomataceae A.Juss. is a pantropical family with about 5750 species distributed in 177 genera and 18 tribes (Michelangeli *et al.* 2020). The plants occur across the tropical and subtropical regions of the globe, with most species concentrated in the new world (Renner 1993). In Brazil it is the fifth richest family (BFG 2015), with about 1436 species, and 69 genera, with species in all states and biomes, but more diverse in the Amazon, Atlantic Forest and Cerrado (Goldenberg *et al.* 2020).

Besides the wide distribution, the plants also vary in habit, ranging from herbs, shrubs, subshrubs to trees, and rarely climbers (Goldenberg *et al.* 2012). With the exception of some taxa that belong to the subfamily Olisbeoideae, the species of the family are easily recognized by the decussate simple leaves with acrodromous venation (Clausing & Renner 2001). Other characters that are useful for its recognition are the leaves lacking stipules and the flowers with poricidal anthers and prolonged connectives. The family has an important ecological role, providing food and housing for several species of animals (Messeder *et al*. 2020), and also some economic importance as ornamentals (Judd *et al*. 2009).

Melastomataceae is the seventh richest family in Espírito Santo (Dutra *et al.* 2015), with about 21 genera and 200 species, from which 51 are endemic (Goldenberg *et al.* 2020). For the state, besides the floras for the genera *Miconia* Ruiz & Pav. (Bacci *et al*. 2016) and *Bertolonia* Raddi (Bacci *et al*. 2017), and the tribe Cambessedesieae (Bochorny & Goldenberg 2017), floristic studies were carried out in the "Área de Proteção Ambiental de Mestre Álvaro" (APAMA) (Iglesias & Dutra 2017), in the "Parque Estadual do Forno Grande" (PEFG) (Meirelles & Goldenberg 2012) and in the "Estação Biológica de Santa Lúcia" (EBSL) (Goldenberg & Reginato 2006), respectively with 26, 39 and 57 species. The study area of this work is located in the same municipality of EBSL, Santa Teresa, and is called "Parque Natural Municipal de São Lourenço" (PNMSL).

The state of Espírito Santo is entirely located inside the Atlantic Forest biome. Within it, approximately 57% of the forest is covered with Ombrophilous Dense Forest and 29% with Semideciduous Seasonal Forest, with pioneer formations, grasslands and campinaranas covering the remaining area (Fraga *et al*. 2019). As in the other Brazilian states covered with Atlantic forest, in Espírito Santo this biome has also been devastated, with only about 10,9% of its initial coverage remaining (SOS Mata Atlântica & INPE 2019).

The forest inside PNMSL is in a good conservation state, and the specimens previously sampled in the area show a high richness of Melastomataceae species (Mota 2009). A previous list of species carried out for the PNMSL management plan found 37 species, of which nine were undetermined and several of them had uncertain identification (Mota 2009). The goal of this study is to present a taxonomic treatment for Melastomataceae from PNMSL, with an identification key, descriptions, illustrations, pictures, comments on phenology and ecology, to help recognize the species and improve the knowledge about them in the area.

Material and Methods

Study area

The study was carried on the PNMSL, a conservation unit located within the municipality of Santa Teresa, in the central region of Espírito Santo. Created in 2004 by the Municipal Decree Nº. 297/2004, the PNMSL is situated in the municipality of Santa Teresa, in the central mountain microregion region of Espírito Santo at the coordinates 40º35'28"W, 19º56'12"S. With 312,67 ha. (Fig. 1), the PNMSL is divided into two main areas: a larger eastern area, adjacent to the city and where sits the "Reserva Biológica da Caixa d'Água", and another to the west, where sits the "Country Club de Santa Teresa" and private-owned lands that are still under negotiation to be officially included in the park (Mota 2009).

Following the classification of Köppen (1948), the climate of the municipality is Cwa, i.e. subtropical, humid, with a dry winter (Thomaz & Monteiro 1997). The average annual temperature is 19.5º C and the average annual rainfall is 1,491.6 mm with a strong decrease during the winter season (INCAPER 2020). The region is mountainous, with an elevation ranging from 100 to 1150 m, while in PNMSL it varies from 700 to 921 m (Mota 2009).

The PNMSL is predominantly covered by Montane Ombrophilous Dense Forest (Veloso *et al.* 1991) in good state of conservation, with the canopy ranging approximately from 10 to 30 m, but it also has areas covered with secondary vegetation ("capoeira"), rocky outcrops, and still some areas with Eucalyptus-planted forests and cultivation (Mota 2009). There is also an area on sandy soil, with an open canopy and with heliophile species.

Expeditions and specimens analysis

For specimen collections, field expeditions were carried out from May 2019 to March 2020, aiming to cover the largest area possible of the PNMSL and its buffer zone. We took notes about the specimens and the habitat in which they occur. In addition to the material collected during this period, specimens from earlier collections, mostly deposited at the herbaria MBML and RB (herbarium acronyms follow Thiers, continuously updated) were consulted in loco; specimens from other collections (FLOR, HUEFS, MBM, NY, UPCB, US, VIES) were consulted through the virtual herbaria Reflora (2021) and SpeciesLink (2021).

Cultivated individuals of *Pleroma raddianum* (DC) Gardner (formerly *Tibouchina pulchra* Cogn.) were found in some residences within the study area, but this species does not occur spontaneously in the park and, therefore, it was not included in this work. *Miconia tristis* Spring and *Mouriri chamissoana* Cogn. have not been recorded inside the PNMSL, however were collected in nearby areas and, therefore, were included as possible occurrences.

Descriptions and commentaries

The names of species, authors and publications, as well as their abbreviations, were confirmed through the online database Tropicos (2020). Synonyms were listed only in the case of recent transfers from *Tibouchina* Aubl. to *Pleroma* (Guimarães *et al.* 2019), *Trembleya* DC. to *Microlicia* D.Don (Versiane *et al*. 2021) and from *Clidemia* D.Don, *Leandra* Raddi and *Ossaea* DC. to *Miconia* Ruiz & Pav. (Michelangeli *et al*. 2019). Endangered species were consulted through the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al*. 2019) and through the "Lista Vermelha da flora brasileira" (CNCFlora 2021).

Measures were taken from leaves, inflorescences and flowers when mature. The morphological terminology was based on Radford *et al.* (1974), but the trichomes were described based on Wurdack (1986). For the leaf veins, we counted the most prominent longitudinal veins, but added a "+2" when there was an additional external pair of tenuous veins that do not reach the leaf apex. For the calyx, only external sepals (or lobes) have been described. Bracteoles were described only for the genus *Pleroma* D.Don and interpetiolar ridges were described only for the species *Miconia cinnamomifolia* (DC.) Naudin and *Miconia cristata* (Reginato & R.Goldenb.) R.Goldenb.

Information on distribution was based on records from virtual herbaria and data from Flora do Brasil (2020). For the description of structures that could not be evaluated in exsiccates from the PNMSL, specimens from nearby locations were used as additional material. Plant height, comments on habitat and phenological data were described based on the information found in specimen labels and observations made in field.

Results and discussion

We found 56 species of Melastomataceae in the PNMSL and adjacent areas, distributed in 10 genera: *Aciotis* D.Don (1 sp.), *Acisanthera* P.Browne (1 sp.), *Bertolonia* Raddi (1 sp.), *Chaetogastra* DC. (1 sp.), *Henriettea* DC. (1 sp.), *Meriania* Sw. (1 sp.) *Miconia* Ruiz & Pav. (42 spp.), *Microlicia* D.Don (1 sp.), *Mouriri* Aubl. (1 sp.), and *Pleroma* D.Don (6 spp.).

Among the species occurring there, *Miconia leamarginata* R.Goldenb., *Miconia corcovadensis* R.Goldenb., *Miconia crenata* (Vahl) Michelang., *Miconia debilis* (Crueg.) Michelang., *Miconia fallacissima* (Markgr.) R.Goldenb., *Miconia latecrenata* (DC.) Naudin, *Miconia leafallax* R.Goldenb., *Miconia paniculata* (Mart. & Schrank ex DC.) Naudin, *Miconia pubistyla* (Wurdack) R.Goldenb. and *Pleroma fissinervium* (Schrank & Mart. ex DC.) Gardner are widely distributed in all vegetation types in PNMSL, with *M. leamarginata*, *M. crenata*, *M. debilis*, *M. latecrenata* and *P. fissinervium* occurring mainly in open and degraded areas. In degraded areas and clearings, it is also possible to find *Acisanthera variabilis* (DC.) Triana, *Chaetogastra sebastianopolitana* (Raddi) P.J.F.Guim. & Michelang., *Miconia albicans* (Sw.) Steud. and *Pleroma heteromallum* (D.Don) D.Don, the latter also found as cultivated in local properties. *Miconia sellowiana* Cogn. and *Pleroma boudetii* (P.J.F.Guim. & R.Goldenb.) P.J.F.Guim. & Michelang. were found only in areas on sandy soil and open canopy, where individuals of *Miconia capixaba* R.Goldenb. are also easily found. *Aciotis paludosa* (Mart. ex DC.) Triana and *Bertolonia ruschiana* Bacci & R.Goldenb. occur exclusively in areas close to streams, habitats in which *Miconia dasytricha* (A.Gray) R.Goldenb. and *Miconia robusta* Cogn. are also more common. *Pleroma radula* (Markgr.) P.J.F.Guim. & Michelang. and *Microlicia parviflora* (D.Don) Versiane & R.Romero are found on rocky outcrops. The remaining species are mainly found in well preserved Montane Ombrophilous Dense Forest.

Six species that occur in the PNMSL are subject to some threat according to the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al*. 2019), with *Bertolonia ruschiana* Bacci & R.Goldenb., *Miconia cristata* (Reginato & R.Goldenb.) R.Goldenb., *Miconia setosociliata* Cogn. and *Pleroma boudetii* (P.J.F.Guim. & R.Goldenb.) classified as Vulnerable (VU), and *Miconia capixaba* R.Goldenb. and *Miconia labiakiana* R.Goldenb. & C.V.Martin as Endangered (EN). According to the "Lista Vermelha da flora brasileira" (CNCFlora 2021) the species *Meriania tetramera* Wurdack, *Miconia fasciculata* Gardner, *Miconia octopetala* Cogn., *Miconia polyandra* Gardner and *Miconia robusta* Cogn. are classified as Least Concern (LC), and the only threatened species according to this list are *Miconia setosociliata*, *Pleroma boudetii*, both classified as Vulnerable (VU) and *Miconia capixaba*, classified as Critically Endangered (CR) in this source.

Thirty-three species found in the PNMSL also occur in the other area in Santa Teresa for which there is a list of Melastomataceae, the "Estação Biológica de Santa Lúcia", while 14 species also occur in "Parque Estadual de Forno Grande", and 17 occur in "Área de Proteção Ambiental de Mestre Álvaro". Regarding the species listed in the park's management plan, we found additional 29 species; from these 29 species, 17 were collected for the first time in the region, and the rest were new identifications on older specimens. During the collections carried out for this work, *Miconia cuneatissima* R.Goldenb. & Michelang.was registered for the first time in the state, with only one individual found in the area.

Taxonomy

Melastomataceae Juss.

Herbs, subshrubs, shrubs and trees. Branches quadrangular, sub-cylindrical or cylindrical, sometimes decorticant. Leaves opposite, simple, petiolate, subsessile or sessile, membranaceous, chartaceous or coriaceous, margins ciliate or eciliate, with 3-9 acrodromous veins, basal or suprabasal, seldom brochidodromous (*Mouriri*), sometimes with marsupiform domatia on the abaxial surface (*Miconia paniculata*; *Miconia pusilliflora*; *Miconia sellowiana*; *Miconia setosociliata*), glabrous or covered with indument. Inflorescences as panicles with dichasial, glomerulate or scorpioid branching, botryoid or seldom solitary, terminal or axillary. Flowers 4-8-merous, sessile or pedicellate. Hypanthium campanulate or urceolate. Calyx persistent or caducous. Petals white, pinkish or purple, apex acute, rounded or truncate. Stamens 8, 10 or 12, isomorphic, subisomorphic or heteromorphic; filaments glabrous or pilose; connective prolonged below the thecae or not, with or without appendages; anthers white, pink, purple or violet, poricidal, seldom rimose. Ovary inferior, semi-inferior or superior, apex glabrous or pilose; style filiform, straight or sigmoid, glabrous or pilose. Fruits fleshy or dry, in this case regular capsules or seldom obtriquetrous.

Identification key

1 Leaves with brochidodromous venation……...…….....50. *Mouriri chamissoana*

1’ Leaves with acrodromous venation……..……..…..…..…….2

2 Ovary superior, sometimes partially adhered to hypanthium through longitudinal septa; fruits dry.……..……..……3

2’ Ovary inferior or half-inferior; fruits fleshy….……..……...……..…..14

3 Herbs; mature plants up to 30 cm tall.…….....4

3’ Subshrubs, shrubs or trees; mature plants more than 50 cm tall…….……..5

4 Inflorescences with scorpioid branches; fruits angular, obtriquetrous……..….3. *Bertolonia ruschiana*

4’ Inflorescences dichasial; fruits non-angular, non-obtriquetrous.....1. *Aciotis paludosa*

5 Flowers tetramerous ……...…….6

5’ Flowers pentamerous ……...…….…….……....7

6 Subshrubs; mature plants less than 1,5 m tall.....4. *Chaetogastra sebastianopolitana*

6’ Trees; mature plants more than 13 m tall……...…….....6. *Meriania tetramera*

7 Inflorescences axillary……...…….....……...49. *Microlicia parviflora*

7’ Inflorescences terminal…….....…….....…….……..8

8 Ovary apex glabrous……...…….....2. *Acisanthera variabilis*

8’ Ovary apex pilose……..……...…..……..……..…….9

9 Shrubs; mature plants up to 3 m tall..……..……...….10

9’ Trees; mature plants more than 4 m tall…..……..…….…12

10 Anthers connective glabrous…….....53. *Pleroma clidemiodes*

10’ Anthers connective with glandular trichomes…..…..…….....11

11 Leaf blades 10.2-16.8 x 4.1-9.3 cm…….....55. *Pleroma heteromallum*

11’ Leaf blades 1.7-9.1 x 1.4-4.3 cm……..…..…..……56. *Pleroma radula*

12 Bracteoles cucullate, forming a calyptra…….…….…….....51. *Pleroma arboreum*

12’ Bracteoles not cucullate and not forming a calyptra……..…….…….……13

13 Stamens with filaments covered with glandular trichomes…….52. *Pleroma boudetii*

13’ Stamens with filaments covered with eglandular trichomes…..…54. *Pleroma estrellense*

14 Inflorescences exclusively axillary or ramiflorous.……..…….…….…..……15

14’ Inflorescences terminal or pseudo terminal, sometimes terminal and axillary.....24

15 Inflorescences ramiflorous….…….5. *Henriettea glabra*

15’ Inflorescences exclusively axillary.……..……..…….16

16 Flowers tetramerous…….……..……17

16’ Flowers pentamerous…….....……19

17. Inflorescence glomerulate……..……..……20. *Miconia debilis*

17’ Inflorescence dichasial……..…….18

18 Petals with rounded apex……..…….11. *Miconia capilliflora*

18’ Petals with acute apex……...….....47. *Miconia suprabasalis*

19 Leaves with scattered sessile glands……...…….....47. *Miconia suprabasalis*

19’ Leaves densely or moderately covered with long-stalked glandular trichomes or non-glandular trichomes……..……20

20 Inflorescence glomerulate……..…..14. *Miconia corcovadensis*

20’ Inflorescence dichasial……...…….....21

21 Petals with rounded apex……..……15. *Miconia crenata*

21’ Petals with acute apex……..……...……22

22 Anthers white……21. *Miconia diffusa*

22’ Anthers yellow……..……..23

23 Ovary apex covered with stellate trichomes; inflorescences 1-2 cm long……..33. *Miconia leamarginata*

23’ Ovary apex covered with unbranched trichomes; inflorescences 2-7 cm long…….....8. *Miconia amygdaloides*

24 Petals with rounded, truncate or obtuse apex…….……...25

24’ Petals with acute apex……..……...46

25 Leaf abaxial surface densely covered with trichomes, so that the actual surface is not visible…...…….……...26

25‘ Leaf abaxial surface glabrous, sparsely or moderately covered with trichomes, so that the actual surface is always visible…….…..…….36

26 Flower octamerous…….…….……36. *Miconia octopetala*

26’ Flower tetramerous, pentamerous or hexamerous……..……27

27 Anthers yellow…….22. *Miconia dodecandra*

27’ Anthers white……..…..…….....28

28 Leaf margins ciliate; abaxial surface with the inner pair of acrodromous veins joining the midrib with domatia……...…….....45. *Miconia setosociliata*

28’ Leaf margins eciliate; abaxial surface without domatia……..…….……..…….29

29 Inflorescences less than 3.5 cm long……..12. *Miconia capixaba*

29’ Inflorescences more than 4 cm long…….……...……30

30 Inflorescences with scorpioid branching…….…….……31

30’ Inflorescences with glomerulate or dichasial branching …….....…….……...32

31 Leaf abaxial surface covered with stellate trichomes……...17. *Miconia cubatanensis*

31’ Leaf abaxial surface covered with arachnoid trichomes.....7. *Miconia albicans*

32 Inflorescences with dichasial branching……..……..23. *Miconia dorsaliporosa*

32’ Inflorescences with glomerulate branches ……...…….……33

33 Mature leaves over 28 cm long, with the inner pair of acrodromous veins diverging more than 3 cm above the base……..…….…….…43. *Miconia robusta*

33’ Mature leaves less than 28 cm long, with the inner pair of acrodroumous veins never diverging more than 3 cm above the base …….……34

34 Ovary apex covered with stellate trichomes…….....10. *Miconia buddlejoides*

34’ Ovary apex glabrous ……..…….……..…….35

35 Anther connective with ventral appendages..…...……..27. *Miconia flammea*

35’ Anther connective without ventral appendages…...…….....28. *Miconia formosa*

36 Nodes with conspicuous interpetiolar ridges……..…....13. *Miconia cinnamomifolia*

36’ Nodes without conspicuous interpetiolar ridges…….……..……...…...37

37 Anthers yellow……..…….……..…..38

37’ Anthers white…….……...……..39

38 Flowers pentamerous; hypanthium with glandular trichomes…….30. *Miconia labiakiana*

38’ Flowers tetramerous; hypanthium glabrous……....34. *Miconia lucenae*

39 Inflorescences with scorpioid branching……..……39. *Miconia polyandra*

39’ Inflorescences with glomerulate or dichasial branching…….……..…….….40

40 Inflorescences with glomerulate branches…….……..……41

40’ Inflorescence with dichasial branching…….……..……...….42

41 Calyx caducous…..…….....9. *Miconia atlantica*

41’ Calyx persistent...…….……...….26. *Miconia fasciculata*

42 Leaf abaxial surface with the inner pair of acrodromous veins joining the midrib without domatia; inflorescence terminal and axillary……...……...…..43

42’ Leaf abaxial surface with the inner pair of acrodromous veins joining the midrib with domatia; inflorescence only terminal……...…….……..…….....44

43 Leaves with the inner pair of veins basal……31. *Miconia latecrenata*

43’ Leaves with the inner pair of veins suprabasal…….....……48. *Miconia tristis*

44 Anthers dehiscing through an apical pore……...……37. *Miconia paniculata*

44’ Anthers dehiscing through a ventral slit covering the whole thecae or a large apical pore covering ⅓ of the thecae……...……..……...…...45

45 Anthers dehiscing through a ventral longitudinal slit, covering the whole thecae; branches not decorticant when mature..…….…....41.*Miconia pusilliflora*

45’ Anthers dehiscing through a large apical pore, covering ⅓ of the thecae; branches decorticant when mature……..44. *Miconia sellowiana*

46 Leaves with an amplexicaul base……..…..……38. *Miconia pectinata*

46’ Leaf base not amplexicaul……..…….....47

47 Nodes with conspicuous interpetiolar ridges….....15. *Miconia cristata*

47’ Stem nodes without interpetiolar ridges……..…..…….....48

48 Flowers hexamerous……..……...……..49

48’ Flowers pentamerous……..……...……50

49 Stamens with the antesepalous anthers 0.5-0.6 cm, with a conspicuous dorsal caudate appendage……..……40. *Miconia pubistyla*

49’ Stamens with the antesepalous anthers up to 0.4 cm, without or with an inconspicuous dorsal appendage.……...……...35. *Miconia melastomoides*

50 Anthers yellow…….……..……...……..51

50’ Anthers white or pink…….……...……..52

51 Acrodromous veins 3+2…….....18. *Miconia cuneatissima*

51’ Acrodromous veins 5+2…….....29. *Miconia ionopogon*

52 Leaves with the inner pair of acrodromous veins basal…..…….….19. *Miconia dasytricha*

52’ Leaves with the inner pair of acrodromous veins suprabasal……...……...…….....……53

53 Acrodromous veins 3+2……..…..…….....…....…….54

53’ Acrodromous veins 5+2…….....…….……55

54 Hypanthium 0.2-0.3 cm long; leaves sparsely covered with trichomes...24. *Miconia dubia*

54’ Hypanthium 0.4-0.6 cm long; leaves densely covered with trichomes…….25. *Miconia fallacissima*

55 Ovary apex pilose……32. *Miconia leafallax*

55’ Ovary apex glabrous…….…..…….56

56 Stems, petioles and leaves covered with patent trichomes…….....42. *Miconia refracta*

56’ Stems, petioles and leaves covered with appressed trichomes.....46. *Miconia strigilliflora*

1. *Aciotis paludosa* (Mart. ex DC.) Triana, Trans. Linn. Soc. London 28(1): 51. 1871 [1872]. Fig. 2a.

Herbs, 10-30 cm tall. Stems quadrangular, winged, with adventitious roots, densely covered with red unbranched trichomes. Petioles 0.7-2 cm long. Leaf blades 3-10 x 1.4-4 cm, membranaceous, ovate, concolorous, base attenuate, apex acute to cuneate, margins serrate, ciliate, acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface covered with scattered elongate unbranched trichomes, abaxial surface glabrescent with scattered unbranched trichomes, surface visible. Inflorescence 3.5-6 cm long, dichasial, terminal. Flowers tetramerous, pedicellate. Hypanthium 0.2-0.3 cm long, urceolate, covered with unbranched glandular trichomes. Calyx persistent, sepals triangular, apex acute. Petals white to pink, apex acute. Stamens 8, isomorphic; filaments glabrous; connective shortly prolonged below the thecae, without appendage; anthers white, 0.1 cm long, dehiscing through an apical pore. Ovary semi-inferior, apex glabrous; style filiform, glabrous. Fruits capsular.

Specimens analyzed: PNMSL, Circuito Caravaggio, trilha à margem direita da estrada, próxima a pista de motocross, 799 m, 19°55'20.81" S, 40°37'17.06" W, fl. and fr., 4.XII.2019, *P.M.L.A Santos* 163 (RB); Estação Biológica Caixa D'Água, 19°55'53"S, 40°36'27"S, 30.X.1985, fl. and fr., *W. Boone* 496 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Nova Lombardia, 7.II.2011, fl. and fr., *F.A. Michelangeli et al.* 1603 (UPCB); Estação Biológica de Santa Lúcia, 20.XI.1985, fl. and fr., *J.M. Vimercat* 300 (UPCB); Mata Fria, 21.XI.1985, fl. and fr. *W. Pizziolo* 234 (MBML).

In PNMSL *Aciotis paludosa* occurs on river banks or flooded areas and can be recognized by the herbaceous habit, quadrangular and winged stems, tetramerous flowers and capsular fruits.

This species occurs in Brazil in the states of Maranhão, Pernambuco, Bahia, Mato Grosso, Distrito Federal, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo and Paraná. In PNMSL it was sampled with flowers and with fruits in October and December.

2. *Acisanthera variabilis* (DC.) Triana, Trans. Linn. Soc. London 28(1): 34. 1871 [1872]. Fig. 2b.

Subshrubs, ca. 60 cm tall. Stems quadrangular, subwinged, sparsely covered with long-stalked glandular trichomes. Petioles 0.1-0.2 cm long. Leaf blades 0.8-1.3 x 0.7-1.3 cm, membranaceous; ovate, elliptic or large elliptic, concolorous or slightly discolorous when dried, base rounded to cordate, apex rounded to obtuse; margins serrate, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface glabrous, abaxial surface sparsely covered with long-stalked glandular trichomes more concentrated on veins, surface visible. Inflorescence 4-5.3 cm long, dichasial or occasionally solitary, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.2-0.3 cm long, campanulate, covered with long-stalked glandular trichomes. Calyx persistent; sepals narrow-triangular, apex mucronate. Petals pink, apex rounded. Stamens 10, heteromorphic; filaments glabrous; connective prolonged below the thecae with a white conspicuous ventral bilobate appendage; anthers purple or pinkish, dehiscing through an apical pore, antesepalous 0,3-0,4 cm long, antepetalous 0,2-0,3 cm long. Ovary superior, apex glabrous; style filiform, glabrous. Fruits capsular.

Specimens analyzed: PNMSL, Country Club, 850 m, 19°55'32.0"S, 40°38'08.0"W, 15.XII.1998, fl., *L. Kollmann et al.* 1311 (UPCB); Circuito Caravaggio, beira de estrada, 700 m, 19°55'28.01"S, 40°37'17.6"W 2.V.2019, fl. and fr., *P.M.L.A. Santos* & *C.N. Fraga* 3 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Várzea Alegre, fl. and fr., *V. Demuner et al.* 1524 (MBML).

In PNMSL *Acisanthera variabilis* occurs in open areas and can be recognized by the subshrub habit, pentamerous flowers, heteromorphic stamens with a conspicuous ventral bilobate appendage in the connective and capsular fruits. It is quite similar to the species of the genus *Pleroma*, which can be distinguished by the glabrous ovary apex.

This species occurs in Brazil in the states of Amazonas, Piauí, Paraíba, Bahia, Mato Grosso, Goiás, Distrito Federal, Mato Grosso do Sul, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in May and December and with fruits in May.

3. *Bertolonia ruschiana* Bacci & R.Goldenb., PeerJ: 4. (2016). Figs. 2c,d.

Herbs, ca. 30 cm tall. Stems cylindrical, non-winged or subwinged, with adventitious roots, covered with short-stalked glandular trichomes. Petioles 1.4-6.9 cm long. Leaf blades 10.9-17.9 x 7.7-12.9 cm, chartaceous, bullate; ovate, elliptic or large-elliptic, concolorous or slightly discolorous when dried, base cordate, apex rounded; margins crenate, ciliate; acrodromous veins 5+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; both surfaces covered with short-stalked glandular trichomes, surface visible. Inflorescence 5.5-10 cm long, scorpioid panicles, terminal. Flowers pentamerous, pedicellate. Hyphantium 0.1-0.3 cm long, campanulate, covered with short-stalked glandular trichomes, calyx persistent; sepals large-ovate, apex rounded; petals albo-roseus, apex rounded; stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae with a dorsal acute appendage; anthers yellow ca. 0.2 cm long, dehiscing through a ventral pore. Ovary partially superior, with the base adhered to hypanthium, apex glabrous; style filiform, glabrous, stigma slightly widened. Fruits obtriquetrous capsules.

Specimens analyzed: PNMSL, Trilha Boa, 19°55'26.0"S, 40°37'13.0"W, 29.III.2003, fr., *A.P. Fontana et al.* 545 (MBML); Estação Biológica Caixa D'Água, 19°55'53.0"S, 40°36'27.0"W, 23.XII.1993, fl. and fr. *E. Bausen*, 53 (MBML); 19°55'53.0"S, 40°36'27.0"W, 07.I.1994, fl. and fr. *E. Bausen*, 54 (MBML); 19°55'53.0"S, 40°36'27.0"W, 11.IV.1985, fl. and fr., *L. Kollmann et al. 2039* (MBML); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32.0"S, 40°38'48.94"W, 26.XI.2019, fr., *P.M.LA. Santos* 148 (RB); 19°55'53.0"S, 40°36'27.0"W, 11.IV.1985, fr., *W. Boone* 333 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Santo Henrique, 26.I.2005, fl., *L. Kollmann* & *A.P. Fontana* 7328 (MBML).

In PNMSL *Bertolonia ruschiana* occurs near rivers banks, in Montane Ombrophilous Dense Forest and can be recognized by the herbaceous habit, scorpioid inflorescences and obtriquetrous fruits.

According to the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al.* 2019), this species is threatened, classified as Vulnerable (VU). It is endemic to Espírito Santo with most specimens occurring in Santa Teresa. In PNMSL it was sampled with flowers in April and December, and with fruits in March, April, November and December.

4. *Chaetogastra sebastianopolitana* (Raddi) P.J.F.Guim. & Michelang., Taxon 68(5): 968. 2019. Figs. 2e,3a.

Subshrubs, 0.8-1.5 m tall. Stems quadrangular, subwinged, densely covered with long-stalked glandular and eglandular trichomes mixed. Petioles 0.3-1 cm long. Leaf blades 2-4.5 x 1.1-2.4 cm, membranaceous, ovate or elliptic, discolorous when dried, base acute to obtuse, apex acute; margins crenulate or serrate, ciliate; acrodromous veins 5+2 with the first and second pair of lateral veins joining above the base, the inner pair basal, joining the midrib without domatia on the abaxial surface; both surfaces covered with appressed unbranched eglandular trichomes, these denser on abaxial surface, surface visible. Inflorescence 7.9-20.5 cm long, dichasial, terminal and axillary. Flowers tetramerous, pedicellate. Hypanthium 0.3-0.4 cm long, urceolate, covered with long-stalked glandular and eglandular trichomes. Calyx persistent; sepals triangular, apex acute. Petals purple, apex rounded. Stamens 8, heteromorphic; filaments glabrous; connective prolonged below the thecae, with a ventral bilobate appendage; anthers yellow, dehiscing through an apical pore, antesepalous 0.3-0.5 long, antepetalous ca. 0.2-0.4 cm long. Ovary superior, apex covered with unbranched eglandular trichomes; style filiform, glabrous. Fruits capsular.

Specimens analyzed: PNMSL, Circuito Caravaggio, beira de estrada, 700 m, 19°55'S, 40°37'W, 2.V.2019, fl. and fr., *P.M.L.A. Santos* 2 (RB); área de brejo, 858, 19º54'58.97"S, 40°37'36.56"W, 25.VIII.2019, fr., *P.M.L.A. Santos et al.* 104 (RB); Vargem Alta (Acima do Country Club) 19°54'56"S, 40°39'W, 19.IV.2000, fl. and fr., *V. Demuner* 915 *et al*. (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Estação Biológica de Santa Lúcia, 19.V.1995, fl., *C.C. Chamas* 73 (MBML); 04.IV.1984, fl., *W. Pizziolo* 17 (MBML).

In PNMSL *Chaetogastra sebastianopolitana* occurs in open areas and can be recognized by the subshrub habit, tetramerous flowers with purple petals, heteromorphic yellow stamens and capsular fruits.

This species occurs in Brazil in the states of Minas Gerais, Espírito Santo and Rio de Janeiro. In PNMSL it was sampled with flowers in April and May and fruits April, May and August.

5. *Henriettea glabra* (Vell.) Penneys, Michelang., Judd & Almeda, Syst. Bot. 35(4): 797. 2010. Fig. 2f.

Trees, 6-14 m tall. Stems cylindrical, non-winged, glabrous. Petioles 1.8-3.5 cm long. Leaf blades 10.6-17.3 x 4.7-8.6 cm, coriaceous, ovate, concolorous, base acute to attenuate, apex acute; margins entire or serrate, ciliate or eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.6-2.2 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces glabrous, surface visible. Inflorescence fasciculate, ramiflorous. Flowers tetramerous, pedicellate. Hypanthium 0.5-0.6 cm long, campanulate, glabrous. Calyx inconspicuous. Petals white, apex acute. Stamens 8, isomorphic; filaments glabrous; connective dorsally thickened, not prolonged below the thecae, with an acute dorsal appendage; anthers ca. 0.3-0.4 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica Caixa D'Água, 19°55'53.0"S, 40°36'27.0"W, 30.VII.1998, fr., *E. Bausen* & *W. Piziollo* 134 (MBML); mata próxima a estrada do circuito Caravaggio, 19º55'24.57"S, 40º37'17.43"W, 30.VII.2019, fr. *P.M.L.A. Santos* & *J. Külkamp* 55 (RB); 19º55'24.57"S, 40º37'17.43"W, 9.III.2020, fl. *P.M.L.A. Santos* & *J.P.F. Zorzanelli* 197 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, São Lourenço, 25.VI.1998, fr., *L. Kollmann et al.* 137 (MBML); 27.I.1999, fl. and fr., *L. Kollmann et al.* 1713 (MBML); 07.IV.1999, fr., *L. Kollmann et al.* 2435 (MBML); Reserva Biológica Augusto Ruschi, 20.II.2002, fl. *L. Kollmann* 5595 *et al.* (MBML).

In PNMSL *Henriettea glabra* occurs in Montane Ombrophilous Dense Forest. It can be recognized by the tree habit, glabrous leaves, ramiflorous inflorescence and fleshy fruits.

This species occurs in Brazil in the states of Bahia, Espírito Santo, Rio de Janeiro, São Paulo and Santa Catarina. In PNMSL it was collected with flowers in March and with fruits in July.

6. *Meriania tetramera* Wurdack, Phytologia 45(4): 324. 1980. Fig. 2g.

Trees, up to 13 m tall. Stems sub-cylindrical, non-winged, glabrous or covered with caducous amorphous trichomes. Petioles 1.2-3.5 cm long, canaliculate. Leaf blades 9-13.6 x 2.8-4.9 cm, chartaceous, elliptic, lanceolate or oblanceolate, concolorous, base acute to attenuate, apex acute to acuminate; margins entire to dentate, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.6-1.8 above the base, joining the midrib without domatia on the abaxial surface; adaxial surface glabrous, abaxial surface moderately with furfuraceous amorphous trichomes, surface visible. Inflorescence 2.1-3.7 cm long, umbel, terminal. Flowers tetramerous, pedicellate. Hypanthium 0.3-0.5 cm long, campanulate, covered with amorphous trichomes. Calyx persistent; sepals irregular. Petals white or pink, apex rounded, slightly acuminate. Stamens 8, isomorphic; filaments glabrous; connective prolonged below the thecae, with an acute dorsal appendage; anthers ca. 0.3 cm long, white, yellowish or pinkish, dorsally arched, dehiscing through an apical pore. Ovary superior, apex glabrous; style ondulate, glabrous. Fruits capsular.

Specimens analyzed: PNMSL, Estação Biológica Caixa D'Água, 19°55'53.0"S, 40°36'27.0"W, 10.VIII.1995, fl., *E. Bausen* 80 (MBML); 19°55'53.0"S, 40°36'27.0"W, 30.VII.1998, fl. and fr., *E. Bausen* & *W. Piziollo* 121 (MBML); 19°55'52.0"S, 40°37'14.0"W, 25.VII.1998, fl., *L. Kollmann at al.* 140 (MBML); 19°55'53.0"S, 40°36'27.0"W, 18.V.1999, fl., W. P. Lopes 709 (MBML); Trilha do Caravaggio, 21.VIII.2001, fr., *L. Kollmann* & *E. Bausen* 4379 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Castelo, Parque Estadual do Forno Grande, 18.VII.2008, fl., *R. Goldenberg et al.* 1185 (MBM).

In PNMSL *Meriania tetramera* is unfrequent and has not been collected since 2001. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the tree habit, umbellate inflorescences, anthers with dorsal appendage and dry fruits.

According to the "Lista Vermelha da flora brasileira" (CNCFlora 2021), this species is classified as Least Concern (LC). It occurs in Brazil in the states of Bahia and Espírito Santo. In PNMSL it was sampled with flowers in and fruits July and August.

7. *Miconia albicans* (Sw.) Steud., Nomencl. Bot. (ed. 2): 139. 1841. Fig. 3b.

Shrubs, 1-2 m tall. Stems cylindrical, non-winged, moderately covered with arachnoid trichomes. Petioles 0.2-0.9 cm long. Leaf blades 4.3-9.8 x 2.7-4.5 cm, coriaceus, elliptic to obovate, discolorous, base rounded, apex rounded, obtuse or slightly acuminate; margins entire to crenulate, revolute, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface covered with arachnoid trichomes when young, then glabrescent, abaxial surface densely covered with arachnoid trichomes, surface not visible. Inflorescence 8.6-11.5 cm long, scorpioid panicles, terminal. Flowers pentamerous, sessile. Hypanthium ca. 0.2 cm long, campanulate, densely covered with arachnoid trichomes. Calyx persistent; sepals large triangular, apex obtuse. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, with a ventral biauriculate and a dorsal acute appendage; anthers 0.2-0.3 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style straight, glabrous; stigma capitate. Fruits fleshy.

Specimens analyzed: PNMSL, mata próxima a estrada do circuito Caravaggio, 749 m, 19°55'24.57"S, 40°37'17.51"W, 20.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 63 (RB); Circuito Caravaggio, à margem esquerda da estrada principal, após a entrada da Cachoeira do Country Club, 837 m, 19º55'37.14"S, 40º38'39.93"W, 5.XII.2019, fr., *P.M.L.A. Santos* 170 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, 21.VII.1978, fl., *Cézio* 890 (UPCB). Fundão, Timbuí, 11.IX.1984, fl. *R.M. Pizziolo* 231 (MBML). Cariacica, Reserva Biológica Duas Bocas, fl., 21.X.2008, *L. Kollmann et al.* 11242 (MBML).

In PNMSL *Miconia albicans* occurs mostly in degraded areas. It can be recognized by the adaxial surface of the leaves densely covered with arachnoid trichomes, and scorpioid panicles.

This species occurs in all states of Brazil with exception of Santa Catarina and Rio Grande do Sul. In PNMSL it was sampled with buds in July and with flowers in December.

8. *Miconia amygdaloides* (DC.) R.Goldenb., Brittonia 71(1): 86. 2019 [2018].

= *Ossaea amygdaloides* (DC.) Triana, Trans. Linn. Soc. London 28(1): 147. 1871 [1872].

Subshrubs to shrubs, 1-2 m tall. Stems cylindrical, non-winged, covered with stellate and unbranched trichomes. Petioles 0.5-1.6 cm long. Leaf blades 6.8-10.6 x 1-2.9 cm, membranaceous, elliptic, ovate or lanceolate, slightly discolorous, base cuneate, obtuse or rounded, apex acute to acuminate; margins entire to crenate, ciliate; acrodromous veins 5, the inner pair suprabasal, ca. 0.1-0.7 above the base, joining the midrib without domatia on the abaxial surface; adaxial surface moderately covered with unbranched and stellate trichomes, abaxial surface moderately covered with appressed unbranched trichomes, more concentrated on veins, surface visible. Inflorescence 2.1-7.7 cm long, dichasial or solitary, axillary. Flowers pentamerous, pedicellate. Hypanthium ca. 0.2 cm long, campanulate, densely covered with stellate and unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged below the thecae, without appendage; anthers ca. 0.1-0.2 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex covered with unbranched trichomes; style filform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, 19°55'26.0"S 40°37'13.0"W, 24.V.1984, fl., *W.A. Hoffmann* 121 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa: Estação Biológica de Santa Lúcia, 7.XI.1985, fl., *H.Q. Boudet Fernandes* 1591 (MBML); Santo Henrique, 2.XII.2005, fl., *L. Kollmann* & *A.P. Fontana* 8497 (MBML); Loteamento Jardim da Montanha, 23.X.1985, fl., *W. Boone* 836 (MBML).

In PNMSL *Miconia amygdaloides* is unfrequent and was collected only once in 1984. It occurs in open or degraded areas and can be recognized by the axillary inflorescences, petals with acute apex and yellow stamens. It is similar to *Miconia leamarginata*, and they can be distinguished by the ovary apex covered with unbranched trichomes in *Miconia amygdaloides* and covered with stellate trichomes in *Miconia leamarginata*.

This species occurs in Brazil in the states of Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina and Rio Grande do Sul. In PNMSL it was sampled with flowers in May.

9. *Miconia atlantica* Caddah & R.Goldenb., Brittonia 65(3): 352. 2013. Fig. 3c.

Shrubs to trees, 2-10 m tall. Young stems flat, then cylindrical, non-winged, densely covered with stellate trichomes. Petioles 0.7-2.5 cm long, canaliculate. Leaf blades 11.5-25.3 x 3.8-9.2 cm, membranaceous, elliptic, concolorous, base acute to attenuate, apex acute to acuminate; margins entire to crenate, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.3-1.1 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface glabrous, abaxial surface sparsely covered with stellate trichomes, surface visible. Inflorescence 5.4-11.1 cm long, glomerulate panicles, terminal. Flowers pentamerous, sessile. Hypanthium 0.2 cm long, campanulate, densely covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective not or slightly prolonged below the thecae, without appendage; anthers ca. 0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex covered with stellate trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica da Caixa D'Água, 850 m, 19°55'53.0"S, 40°36'27.0"W, 18.IX.1998, fl., *L. Kollmann* 1046 *et al.* (MBML); 750 m, 19°55'53.0"S, 40°36'27.0"W, 17.VI.1999, fr., *L. Kollmann* 2730 (MBML); mata próxima a estrada do circuito Caravaggio, 750 m, 19°55'24.57"S, 40°37'17.53"W, 20.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 60 (RB); 750 m, 19°55'24.57"S, 40°37'17.53"W, 20.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 61 (RB); Trilha da Caixa d'água, adjacente ao PNM São Lourenço, 651 m, 19°55'49.6"S, 40°35'50.12"W, 24.VII.2019, fl., *P.M.L.A. Santos et al.* 86 (RB); Circuito Caravaggio, mata à margem direita da estrada principal, próximo a rampa do voo livre, 858 m, 19°54'59.97"S, 40°37'36.56"W, 25.VIII.2019, fl., *P.M.L.A. Santos* 112 (RB); Mata do Country Club, 858 m, 19°55'25.20"S, 40°38'15"W, 11.X.2019, fl., *P.M.L.A. Santos* 129 (RB); Mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 730 m, 19°55'39.19"S, 40°36'13.47"W, 13.X.2019, fl., *P.M.L.A. Santos* 134 (RB); Circuito Caravaggio, Trilha à margem direita da estrada, próxima a pista de motocross, 799 m, 19°55'20.81"S, 40°37'36.56"W, 25.XI.2019, fl., *P.M.L.A. Santos* 137 (RB); Trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 142 (RB); 26.XI.2019, fl., *P.M.L.A. Santos* 154 (RB); Circuito Caravaggio, Trilha à margem direita da estrada, próxima a pista de motocross, 799 m, 19°55'20.81"S, 40°37'17.06"W, 4.XII.2019, fl., *P.M.L.A.Santos* 166 (RB); Trilha à margem esquerda da estrada principal, após a entrada da cachoeira do Country Club, 837 m, 19°55'37.14"S, 40°38'39.93"W, 5.XII.2019, fl., *P.M.L.A.Santos* 168 (RB); 19.V.1999, *W. P. Lopes* 734 (MBML).

In PNMSL *Miconia atlantica* occurs in Montane Ombrophilous Dense Forest. It can be recognized by the plinerved leaves, with scattered stellate trichomes and glomerulate panicles.

This species occurs in Brazil in the states of Espírito Santo, Rio de Janeiro and São Paulo. In PNMSL it was sampled with flowers in July, August, October, November and December and with fruits in May and June.

10. *Miconia buddlejoides* Triana, Trans. Linn. Soc. London 28(1): 118. 1871.

Trees, up to 12 m tall. Stems flat when young, then cylindrical, non-winged, moderately covered with stellate trichomes. Petioles 1.2-2.5 cm long, canaliculate. Leaf blades 11.8-19 x 4.1-6.8 cm, chartaceous, elliptic, ovate or lanceolate, discolorous, base acute to attenuate, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.4-1.2 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface sparsely covered with stellate furfuraceous trichomes, glabrescent; abaxial surface densely covered with dendritic trichomes, surface not visible. Inflorescence 6.1-12.4 cm long, glomerulate panicles, terminal. Flowers pentamerous, sessile. Hypanthium ca. 0.2 cm long, campanulate, densely covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute, inconspicuous. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, without appendage; anthers white, dehiscing through an apical pore, antesepalous ca. 0.2 cm long, antepetalous ca. 0.1 cm long. Ovary inferior, apex covered with stellate trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Mata Fria, 19°55'52.0"S, 40°41'01.0"W, 09.IX.1998, fl., *L. Kollmann et al.* 500 (MBML); Estrada do Caravage, 19°55'52.0"S, 40°37'14.0"W, 850 m, 12.X.1998, fr., *L. Kollmann et al.* 787 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Reserva Biológica Augusto Ruschi, 800 m, 23.X.2001, fl., *L. Kollmann et al.* 4881 (MBML).

In PNMSL *Miconia buddlejoides* is unfrequent and has not been collected since 1998. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the plinerved leaves, dense indument on the leaf adaxial surface, which makes it not visible, glomerulate panicles, anthers without appendage and ovary covered with stellate trichomes.

This species occurs in Paraguay and Brazil (Caddah *et al.* 2020), in the states of Bahia, Minas Gerais, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in September and with fruits in October.

11. *Miconia capilliflora* (Naudin) R.Goldenb., Brittonia 71(1): 89. 2019 [2018]. Fig. 4a.

= *Leandra capilliflora* (Naudin) Reginato, Phytotaxa 262(1): 33. 2016.

= *Clidemia capilliflora* (Naudin) Cogn. in Mart., Fl. Bras. 14(4): 508. 1888.

Shrubs, ca. 1 m tall. Stems cylindrical, non-winged, glabrous. Petioles 0.2-0.4 cm long. Leaf blades 6.1-9.9 x 2-3.1 cm, membranaceous, lanceolate or elliptic, concolorous, base cuneate to obtuse, apex acute to acuminate; margins entire, ciliate; acrodromous veins 3+ 2, the inner pair basal, joining the midrib without domatia on the abaxial surface; both surfaces sparsely covered with short-stalked glandular trichomes, surface visible. Inflorescence 0.8-2.2 cm long, dichasial, axillary. Flowers tetramerous, pedicellate. Hypanthium ca. 0.2-0.3 cm long, campanulate, sparsely covered with short-stalked glandular trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex rounded. Stamens 8, subisomorphic; filaments glabrous; connective shortly prolonged below the thecae, with a dorsal acute appendage in the antepetals; anthers white, dehiscing through an apical pore, antesepalous ca. 0.2 cm long, antepetalous ca. 0.1-0.2 cm long. Ovary inferior, apex densely covered with short stalked trichomes; style filiform. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica da Caixa D'Água, Valão de São Lourenço, 19°55'53.0"S, 40°36'27.0"W, 16.XII.1993, fl., *E. Bausen* 45 (MBML); 19°55'53.0"S, 40°36'27.0"W, 23.XII.1993, fr., *E. Bausen* 52 (MBML); 19°55'53.0"S, 40°36'27.0"W, 19.V.1994, fl. *E. Bausen* 62 (MBML); 19°55'53.0"S, 40°36'27.0"W, 10.VIII.1995, fr., *E. Bausen* 79 (MBML); 700 m, 19°55'53.0"S, 40°36'27.0"W, 14.IV.1999, fl. and fr., L. *Kollmann* 2470 (MBML); Country Club, Trilha à direita da cachoeira do Country, 859 m, 19°55'23.72"S, 40°38'16.62"W, 3.II.2020, fl., *P.M.L.A. Santos* 189 (RB).

In PNMSL *Miconia capilliflora* occurs in Montane Ombrophilous Dense Forest. It can be recognized by the almost glabrous leaves, axillary inflorescences with long peduncles, tetramerous flowers and subisomorphic white stamens.

This species occurs in Brazil in the states of Bahia, Espírito Santo, and Rio de Janeiro. In PNMSL it was sampled with flowers in February, April, May and December and with fruits in April, August and December.

12. *Miconia capixaba* R.Goldenb., Novon 9(4): 514, F. 1A–F. 1999. Fig. 3d.

Shrubs to trees, 0.5-16 m tall. Stems cylindrical, non-winged, covered with stellate trichomes. Petioles 0.4-0.9 cm long, canaliculate. Leaf blades 6.5-10.2 x 1.6-2.7 cm, chartaceous, lanceolate, discolorous, base acute, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair basal or slightly suprabasal (0.2 cm above the base), joining the midrib without domatia on the abaxial surface; adaxial surface covered with stellate furfuraceous trichomes, glabrescent; abaxial surface densely covered with stellate trichomes, surface not visible. Inflorescence 1.3-3.5 cm long, shortly scorpioid panicles, terminal. Flowers pentamerous. Hypanthium ca. 0.1 cm long, campanulate, densely covered with stellate trichomes. Calyx caducous; sepals inconspicuous, large triangular, apex cuneate. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, without appendage; anthers ca. 0.1 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, 19°55'26.0"S, 40°37'13.0"W, 24.V.2003, fl., *T.A. Cruz et al.* 57 (MBML); mata do Country Club, 559 m, 19º55'25.11"S, 40º38'15.08"W, 21.VII.2019, fl., *P.M.L.A. Santos* 77 (RB); 660 m, 19º55 25.12"S, 40º38'15.08"W, 21.VII.2019, fl., *P.M.L.A. Santos* 78 (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19º55'49.05"S, 40º37'4.50"W, 22.VIII.2019, fl., *P.M.L.A. Santos* 90 (RB); 705 m, 19º55'49.05"S, 40º37'4.50"W, 9.X.2019, fr., *P.M.L.A. Santos* 121 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Estação Biológica de Santa Lúcia, 21.VII.1993, fl., *L.D. Thomaz* (MBML 9300);, 11.VII.2007, fl., *R. Goldenberg et al.* 907 (MBML); Alto de Santo Antônio, 12.VII.2007, fl., *R. Goldenberg et al.* 909 (MBML).

In PNMSL *Miconia capixaba* occurs in Montane Ombrophilous Dense Forest. It can be recognized by the dense indument on the leaf adaxial surface, which makes it not visible, and terminal short (up to 3.5 cm long) inflorescences with scorpioid branching.

This species is threatened, classified as Endangered (EN) in the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al.* 2019), and Critically Endangered (CR) in the "Lista Vermelha da flora brasileira" (CNCFlora 2021). It is endemic to the state of Espírito Santo and in PNMSL it was sampled with flowers in May, July and August and with fruits in October.

13. *Miconia cinnamomifolia* (DC.) Naudin, Ann. Sci. Nat., Bot., sér. 3, 16: 68. 1851. Fig. 3e.

Trees, up to 19 m tall. Stems sub quadrangular, non-winged, covered with stellate furfuraceous trichomes when young, then glabrous. Nodes with conspicuous interpetiolar projections. Petioles 0.4-1.3 cm long. Leaf blades 6.5-11.1 x 2.3-4.1 cm, coriaceous, ovate to elliptic, concolorous, base acute, cuneate, or slightly attenuate, apex acute to acuminate; margins entire, revolute, eciliate; acrodromous veins 3+2, the inner pair basal or slightly suprabasal (0.2 above the base), joining the midrib without domatia on the abaxial surface; both surfaces with scattered stellate furfuraceous trichomes when young, then glabrous, surface visible. Inflorescence 6-10.1 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium ca. 0.2 cm long, campanulate, glabrous. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective with a ventral biauriculate and a dorsal acute appendage; anthers white, dehiscing through an apical pore, antesepalous ca. 0.2-0.3 cm long, antepetalous ca. 0.1-0.2 cm long. Ovary inferior, apex glabrous; style; capitate, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, 19°55'26.0"S, 40°37'13.0"W, 09.VIII.2003, fr., *T.A. Cruz et al.* 60 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Estação Biológica de Santa Lúcia, 650 to 800 m, 18.I.1995, fr., *L.D. Thomaz* 1623 (MBML); Reserva Biológica Augusto Ruschi, 19.XII.2002, fl., *R.R. Vervloet et al.* 1578 (MBML); 09.I.2003, fl., *R.R. Vervloet et al.* 1669 (MBML).

In PNMSL *Miconia cinnamomifolia* is common despite having only one record in 2003. It occurs in Montane Ombrophilous Dense Forest. It can be easily recognized by glabrous leaves and conspicuous interpetiolar projections.

This species occurs in Brazil in the states of Pernambuco, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers fruits in August.

14. *Miconia corcovadensis* (Raddi) R.Goldenb., Brittonia 71(1): 92. 2019 [2018]. Figs. 3f,4b.

= *Leandra angustifolia* DC., Prodr. 3: 154. 1828.

= *Ossaea angustifolia* (DC.) Triana., Trans. Linn. Soc. London 28(1): 147. 1871 [1872].

Shrubs, 1-4 m tall. Stems cylindrical, non-winged, densely covered with appressed unbranched trichomes. Petioles 1.6-2.8 cm long. Leaf blades 9.3-14.2 x 2.8-4.7 cm, membranaceous, lanceolate, slightly discolorous when dried, base cuneate, apex acute; margins entire, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.5-1.1 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces covered with appressed unbranched trichomes, these denser on abaxial surface, most concentrated on veins, surface visible. Inflorescence sessile, glomerulate or solitary, axillary. Flowers pentamerous or hexamerous, sessile. Hypanthium 0.2-0.3 cm long, campanulate, densely covered with appressed unbranched trichomes, sometimes with glands in the apex. Calyx persistent; sepals linear, apex acute. Petals white, apex acute. Stamens 10-12, subisomorphic; filaments glabrous; connective prolonged below the thecae, with a ventral biauriculate appendage in the antesepalous, anthers white, dehiscing through an apical pore, antesepalous ca. 0.3 cm long, antepetals ca. 0.2 cm long. Ovary apex covered with unbranched trichomes; style filiform. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica Caixa D'Água, trilha principal, 19°55'53"S, 40°36'27"W, 23.XII.2002, fl., *A.P. Fontana* & *F.C. Sarmento* 425 (MBML); 19°55'53"S, 40°36'27"W, 30.V.1984, fl., *J. M. Vimercat* 157 (MBML); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 159 (RB); Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da Cachoeira do Country, 866 m, 19°55'5.11"S, 40°38'36.38"W, 25.VIII.2019, fl., *P.M.L.A. Santos* 187 (RB); Trilha margeando o Rio de São Lourenço, 729 m, 19°55'51.73"S, 40°36'27.39"W, 4.II.2020, fl., *P.M.L.A. Santos* & *J.P.F Zorzanelli* 193 (RB); Country Club, trilha a direita da entrada, 931 m, 19°55'18.35"S, 40°37'52.59"W, 9.III.2020, fl. & fr., *P.M.L.A. Santos* 204 (RB).

In PNMSL *Miconia corcovadensis* is common in Montane Ombrophilous Dense Forest. It can be recognized by the axillary, glomerulate inflorescences (occasionally solitary), sessile flowers with white petals with an acute apex, and white stamens.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL was sampled with flowers in February, March, May, August, November and December and with fruits in March.

15. *Miconia crenata* (Vahl) Michelang., Pl.-Book (ed. 4) 1102. 2017. Figs 3g,4c.

= *Clidemia hirta* (L.) D.Don, Mem. Wern. Nat. Hist. Soc. 4: 309. 1823.

Shrubs, 0.3-2 m tall. Stems cylindrical, non-winged, covered with stellate, erect unbranched and long-stalked glandular trichomes. Petioles 0.4-2.1 cm long. Leaf blades 5.1-12.4 x 2.8-8.7 cm, membranaceous, ovate, bullate, concolorous or slightly discolorous when dried, base cordate, apex acute to acuminate; margins crenate, ciliate; acrodromous veins 5+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; both surfaces covered with stellate, erect unbranched and long-stalked glandular trichomes. Inflorescence 1.3-2.8 cm long, dichasial panicles, axillary. Flowers pentamerous, pedicellate. Hypanthium 0.2-0.4 cm long, campanulate, moderately covered with stellate trichomes with sparse long-stalked trichomes. Calyx persistent; sepals linear, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae with a dorsal acute appendage; anthers 0.2-0.3 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica Caixa D'Água, Valão de São Lourenço, 19°55'53.0"S, 40°36'27.0"W, 19.XI.1993, fl. and fr., *E. Bausen* 50 (MBML); mata próxima a estrada do Circuito Caravaggio, 740 m, 19°55'24.57"S, 40°37'17.53"W, 20.VII.2019, fl. and fr., *P.M.L.A. Santos* & *J. Külkamp* 65 (RB); trilha do Caravaggio, 858 m, 19°54'58.97"S, 40°37'36.56"W, 25.VIII.2019, fl. and fr., *P.M.L.A. Santos* 107 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Nova Lombardia, 26.I.2005, fr., *L. Kollmann* & *A.P. Fontana* 7346 (MBML); 11.V.2006, *L. Kollmann* & *S. Krauser* 9081 (MBML).

Miconia crenata is very common in PNMSL and occurs mostly in anthropic and open areas. It can be recognized by the branches, leaves and flowers with long, erect, unbranched trichomes, cordate leaf base, and white flowers with white stamens.

This species occurs in all states of Brazil except Rio Grande do Norte. In PNMSL it was sampled with flowers and fruits in July, August and November.

16. *Miconia cristata* (Reginato & R.Goldenb.) R.Goldenb., Brittonia 71(1): 92. 2019[2018]. Fig. 3h.

= *Leandra cristata* Reginato & R.Goldenb., Blumea 57: 210, f.1a, 2a–d, 3. 2013.

Shrubs, 1-3 m tall. Stems cylindrical, non-winged, glabrous. Nodes with conspicuous interpetiolar projections that extend to the base of the petioles. Petioles 0.3-0.7 cm long. Leaf blades 6-15.1 x 0.9-3.5 cm, chartaceous, lanceolate, discolorous when dried, base decurrent, apex acute to acuminate; margins slightly serrulate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.4-2.5 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces with scattered short-stalked glandular trichomes, surface visible. Inflorescence 7.4-13.4 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium ca. 0.2-0.3 cm long, campanulate, glabrous. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged below the thecae, without appendage; anthers ca. 0.1 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica da Caixa D'Água, 700 m, 19°55'53.0"S, 40°36'27.0"W, 14.IV.1999, fr., *L. Kollmann et al.* 2494 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Santo Henrique, 19.I.2006, fr., *L. Kollmann* & *A.P. Fontana* 8156 (MBML); Rebio A. Ruschi, 12.I.2011, fl., *L. Kollmann* 12138 (MBML);, 11.I.2019, fl., *R. Goldenberg et al.* 2643 (RB);, 20.III.2003, fr., *R.R. Vervloet* & *E. Bausen* 2024 (MBML).

In PNMSL *Miconia cristata* is unfrequent and was collected only once in 1999. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the presence of conspicuous ridges on the base of the petiole, leaves with scattered short-stalked glandular trichomes, and suprabasal lateral veins.

According to the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al.* 2019), this species is threatened, classified as Vulnerable (VU). It is endemic to Espírito Santo and in PNMSL it was sampled with fruits in May.

17. *Miconia cubatanensis* Hoehne, Anexos Mem. Inst. Butantan, Secc. Bot. 1(5): 139–140. 1922. Fig. 3i.

Trees, up to 17 m tall. Stems flat when young, then cylindrical, non-winged, covered with lepidote-stellate trichomes. Petioles 0.9-1.5 cm long, canaliculate. Leaf blades 6.6-9.1 x 1.9-2.7 cm, chartaceous, ovate to lanceolate, discolorous, base acute to attenuate, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface covered with stellate trichomes when young, then glabrous, abaxial surface densely covered with lepidote-stellate trichomes, surface not visible. Inflorescence ca. 4.7-8 cm long scorpioid panicles, terminal. Flowers pentamerous, sessile. Hypanthium ca. 0.2 cm long, campanulate, densely covered with lepidote-stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, subisomorphic; filaments glabrous; connective shortly prolonged below the thecae, with a dorsal acute appendage; anthers ca. 0.1 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Country Club, 19°55'32.0"S, 40°38'08.0"W, 11.IX.1985, fl., *H.Q. Boudet Fernandes* 1480 (MBML); 19°55'26.0"S, 40°37'13.0"W, 30.VIII.2003, bud, *T.A. Cruz et al.* 69 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, 28.VI.1884, *L.D. Thomaz* 830 (MBML).

In PNMSL *Miconia cubatanensis* is unfrequent and has not been collected since 2003. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the adaxial leaf surface glabrous or almost glabrous, the abaxial surface densely covered with indument, which makes the actual surface not visible, and scorpioid panicles.

This species occurs in Brazil in the states of Bahia, Goiás, Distrito Federal, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in and with fruits in August, September.

18. *Miconia cuneatissima* R.Goldenb. & Michelang., Brittonia 71(1): 92. 2019 [2018]. Fig. 4d.

=*Leandra cuneata* (Mart.) Cogn. in Mart., Fl. Bras. 14 (4): 161 (1886).

Shrubs, 1-4 m tall. Stems cylindrical, non-winged, covered with stellate trichomes when young. Petioles 0.4-2.6 cm long. Leaf blades 7.9-21.6 x 2.9-9.2 cm, membranaceous, ovate, discolorous when dried, base cuneate to attenuate, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.6-2.19 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces sparsely covered with stellate trichomes, surface visible. Inflorescence 9.2-16.1 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium ca. 0.2 cm long, campanulate, covered with stellate trichomes. Calyx inconspicuous; sepals short triangular, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective shortly prolonged below the thecae, with a dorsal acute appendage; anthers ca. 0.15 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex covered with stellate trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da cachoeira do Country, 866 m, 19°55'5.11"S, 40°38'36.38"W, 3.II.2020, fl., *P.M.L.A. Santos* 184 (RB).

Additional material: BRAZIL. Bahia: Arataca, Serra do Peito-de-Moça, fl., *A. M. Amorim et al.* 5240 (UPCB). Barro Preto, Serra da Pedra Lascada, 2.XI.2003, fl. and fr., *P. Fiaschi et al.* 1760 (UPCB). Camacã, RPPN Serra Bonita, 29.XI.2005, fl., *A. M. Amorim et al.* 5421 (UPCB); RPPN Serra Bonita, Fazenda Uiraçu, 13.VIII.2009, *L. Daneu et al.* 86 (UPCB).

This is the first record of *M. cuneatissima* in PNMSL and also for Espírito Santo. In PNMSL we found only a few individuals in Montane Ombrophilous Dense Forest. It can be recognized by the plinerved leaves with scattered stellate trichomes, flowers with white petals with an acute apex, and yellow stamens.

This species occurs in Brazil in the states of Bahia, Minas Gerais and Espírito Santo. In PNMSL it was sampled with flowers in February.

19. *Miconia dasytricha* (A.Gray) R.Goldenb., Brittonia 71(1): 93. 2019 [2018]. Figs. 3j,4e. = *Leandra variabilis* Raddi, Melast. Bras.: 42: t. V, fig. 2 also in Mem. Mat. Fis. Soc. Ital. Sci. Modena, Pt. Mem. Fis. 20(1): 150. 1829 (1828).

Shrubs, 1-2 m tall. Stems quadrangular, densely covered with dendritic, elongated roughened and short-stalked glandular trichomes, more concentrated in younger branches. Petioles 0.7-1.9 cm long. Leaf blades 10.9-18.4 x 4.6-11.2 cm, membranaceous, elliptic to ovate, discolorous when dried, base acute to rounded, apex acute to acuminate; margins entire to crenulate, ciliate; acrodromous veins 5+2, the inner pair basal or inconspicuously suprabasal, joining the midrib without domatia on the abaxial surface; adaxial surface sparsely covered with appressed unbranched trichomes, abaxial surface moderately covered with densely covered with dendritic, elongated roughened and short-stalked glandular trichomes, more concentrated on veins, surface visible. Inflorescence 4.1-9.9 cm long, glomerulate panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.2-0.3 cm long, campanulate, densely covered with dendritic, elongated roughened and short-stalked glandular trichomes. Calyx persistent; sepals subulate, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged, without appendage; anthers ca. 0.1 cm long, white, dehiscing through an apical pore. Ovary inferior, apex covered with stellate trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica Caixa D'Água, 700 m, 19°55'53.0"S, 40°36'27.0"W, 24.XI.1998, fl., *L. Kollmann et al.* 1081 (MBML); Trilha margeando o Rio de São Lourenço, 19°55'53.0"S, 40°36'27.0"W, 26.XI.2019, fl., *P.M.L.A. Santos* 140 (RB); Trilha margeando o Rio de São Lourenço, 802 m, 19°55'53.0"S, 40°36'27.0"W, 26.XI.2019, fl., *P.M.L.A. Santos* 160 (RB); Circuito Caravaggio, Trilha à margem esquerda da estrada principal, após a entrada da Cachoeira do Country, 837 m, 19°55'37.14"S, 40°38'39.93"W, 5.XII.2019, fl., *P.M.L.A. Santos* 171 (RB); Country Club, trilha à direita da entrada, 931 m, 19°55'18.35"S, 40°37'52.59"W, 9.III.2020, fr., *P.M.L.A. Santos* 207 (RB).

In PNMSL *Miconia dasytricha* occurs in Montane Ombrophilous Dense Forest, mostly near river banks. It can be recognized by the abaxial leaf surface (mostly on the veins) and inflorescences densely covered with long, dendritic trichomes.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina and Rio Grande do Sul. In PNMSL it was sampled with flowers in November and December and with fruits in March.

20. *Miconia debilis* (Crueg.) Michelang., Brittonia 71(1): 93 2019 [2018]. Fig. 3k.

= *Clidemia debilis* Crueger, Linnaea 20:104. 1847.

Shrubs, 0.5-2 m tall. Stems cylindrical, non winged, densely covered with red unbranched trichomes. Petioles 0.5-2.3 cm long. Leaf blades 7-13.1 x 2.9-6 cm, membranaceous, ovate, concolorous or slightly discolorous when dried, base rounded or obtuse, apex acute to acuminate; margins crenulate, ciliate; acrodromous veins 5+2, the inner pair suprabasal, ca. 0.1-0.8 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces densely covered with unbranched trichomes, surface visible. Inflorescence sessile, glomerulate, axillary. Flowers tetramerous, sessile. Hypanthium 0.2-0.3 cm long, campanulate, densely covered with red unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex rounded. Stamens 8, isomorphic; filaments glabrous; connective shortly prolonged below the thecae, without appendage; anthers ca. 0.1-0.2 cm long, purple, dehiscing through an apical pore. Ovary inferior, apex glabrous; style straight, glabrous; stigma capitate. Fruits fleshy.

Specimens analyzed: PNMSL, mata próxima a estrada do circuito Caravaggio, 650 m, 19°55'22.2"S, 40°38'15.08"W, 21.VII.2019, fl. and fr., *P.M.L.A. Santos* & *J. Külkamp* 67 (RB); 858 m, 19°55'26.0"S, 40°37'13.0"W, 25.VIII.2019, fl., *P.M.L.A. Santos 106* (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19°55'49.05"S, 40°38'04.5"W, 30.I.2020, fl., *P.M.L.A. Santos* 177 (RB). **Additional material:** BRAZIL. ESPÍRITO SANTO: Santa Teresa, Papaçú, 12.VII.2007, 23.IX.2006, fl., *L. Kollmann et al.* 9317 (MBML); Alto de Santo Antônio, 12.VII.2007, fl., *R. Goldenberg et al.* 908 (MBML); Reserva Biológica Augusto Ruschi, 17.X.2002, fl., *R. R. Vervloet et al.* 1247 (MBML).

Miconia debilis is common in PNMSL and occurs mostly in anthropic and open areas. It can be recognized by the sessile, axillary inflorescences, tetramerous flowers and purple anthers.

This species occurs in Brazil in the states of Amazonas, Ceará, Pernambuco, Alagoas, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro and probably in Rondônia. In PNMSL it was sampled with flowers in January, July and August and with fruits in July.

21. *Miconia diffusa* (Cogn.) R.Goldenb., Brittonia 71(1): 93. 2019 [2018]. Fig. 3l.

= *Leandra diffusa* Cogn. in Mart., Fl. Bras. 14 (4): 146: pl. 33, fig. 1 (1886).

Reptant shrubs, 0.5-2 m tall. Stems cylindrical, non-winged, moderately covered with erect unbranched trichomes. Petioles 0.4-1.5 cm long. Leaf blades 3.6-8.3 x 1.6-3.5 cm, membranaceous, ovate, concolorous, base cordate, apex acuminate; margins entire, ciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface covered with appressed unbranched trichomes, abaxial surface moderately covered with elongated unbranched trichomes, most concentrated in the basal portion of the veins, surface visible. Inflorescence 3.8-5.6 cm long, dichasial panicles, axillary. Flowers pentamerous, pedicellate. Hypanthium ca. 0.2-0.3 cm long, campanulate, covered with erect unbranched trichomes and stellate trichomes. Calyx persistent; sepals subulate, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged; anthers ca. 0.1 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Country Club, 850 m, 19°55'32.0"S, 40°38'08.0"W, 15.XII.1998, fl., *L. Kollmann et al.* 1277 (MBML); Circuito Caravaggio, trilha à margem direita da estrada, próxima a pista de motocross, 799 m, 19°55'28.81"S, 40°37'17.06"W, 10.X.2019, fl., *P.M.L.A. Santos* 125 (RB); 858 m, 19°55'25.20"S, 40°38'15.0"W, 11.X.2019, fl., *P.M.L.A. Santos* 130 (RB); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 156 (RB); Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da Cachoeira do Country, 866 m, 19°55'5.11"S, 40°38'36.8"W, 3.II.2020, fl., *P.M.L.A. Santos* 188 (RB); Country Club, trilha à direita da entrada, 882 m, 19°55'25.96"S, 40°37'46.52"W, 9.III.2020, fl., *P.M.L.A. Santos* 208 (RB).

In PNMSL *Miconia diffusa* occurs in Montane Ombrophilous Dense Forest areas and can be recognized by the reptant habit and abaxial leaf surface with long trichomes, mostly concentrated on the basal portion of the veins.

This species occurs in Brazil in the states of Minas Gerais, Espírito Santo and Rio de Janeiro. In PNMSL it was sampled with flowers in February, March, October, November and December.

22. *Miconia dodecandra* Cogn. in Mart., Fl. Bras. 14(4): 243. 1887. Fig. 4f.

Trees, up to 10 m tall. Stems cylindrical, non-winged, covered with dendritic trichomes. Petioles 0.7-3.4 cm long. Leaf blades 8.8-15.6 x 3-7 cm, ovate, elliptic or lanceolate, discolorous, base rounded to obtuse, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface glabrous, abaxial surface densely covered with dendritic trichomes, surface not visible. Inflorescence 8-11.3 cm long, dichasial panicles, terminal. Flowers pentamerous or hexamerous, pedicellate. Hypanthium 0.4-0.5 cm long, campanulate, densely covered with stellate trichomes. Calyx persistent; sepals triangular, apex acute. Petals white to pink, apex rounded. Stamens 10-12, subisomorphic; filaments glabrous; connective prolonged below the thecae, dorsally thickened with a biauriculate ventral appendage; anthers yellow, dehiscing through an apical pore, antesepalous 0.3-0.7 cm long, antepetalous 0.2-0.6 cm long. Ovary inferior, apex covered with dendritic trichomes; style straight, covered with dendritic trichomes in the basal half, stigma capitate. Fruits fleshy.

Specimens analyzed: PNMSL, trilha principal, 19°55'52.0"S, 40°37'14.0"W, 30.III.2002, fl., *A.P. Fontana* & *R.R. Vervloet* 310 (MBML); VIII.2006, fr., *J.M.L. Gomes* (VIES 16814); antiga cachoeira do Country Club, 19°55'30"S, 40°38'11"W, 23.II.2014, fl., *L.C. Marinho et al.* 758 (HUEFS); Country Club, 640m, 19°55'S, 40°37'W 2.V.2019, fl., *P.M.L.A. Santos* & *C.N. Fraga* 8 (RB); mata próxima a estrada do Circuito Caravaggio, 740 m, 19°55'24.57"S, 40°37'17.46"W, 20.VII.2019, fr., *P.M.L.A. Santos* & *J. Külkamp* 58 (RB); Mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19°55'49.05"S, 40°38'4.5"W, 22.VIII.2019, fl., *P.M.L.A. Santos* 92 (RB); 19°55'26.0"S, 40°37'13.0"W, 22.III.2003, fr., *T.A. Cruz et al.* 54 (MBML).

Miconia dodecandra is very common in PNMSL, and occurs mostly in open and degraded areas. It can be recognized by the tree habit, dense indument on the leaf adaxial surface which makes it not visible, flowers with large yellow stamens and style with a capitate stigma.

This species occurs in Brazil in the states of Roraima, Amazonas, Pará, Pernambuco, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo and Paraná. In PNMSL it was sampled with flowers in February, March, May and August and with fruits in March, July and August.

23. *Miconia dorsaliporosa* R.Goldenb. & Reginato, J. Torrey Bot. Soc. 136: 294, f. 2. 2009.

Trees, up to 14 m tall. Stems flat and covered with stellate trichomes when young, then cylindrical and glabrescent, non-winged. Petioles 0.8-3.2 cm long, canaliculate. Leaf blades 4.8-20.7 x 1.1-6.9 cm, chartaceous, elliptic to lanceolate, discolorous when dried, base cuneate, apex acute to obtuse; margins entire, eciliate; acrodromous veins 5+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface covered with furfuraceous dendritic trichomes when young, then glabrous; abaxial surface densely covered with dendritic trichomes, surface not visible. Inflorescence ca. 5.9-11.2 cm long, dichasial panicles, terminal. Flowers pentamerous, sessile or subsessile. Hypanthium ca. 0.2 cm long, campanulate, densely covered with stellate trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, without appendage; anthers ca. 0.15 cm, white, dehiscing through a dorsal pore. Ovary inferior, apex covered with dendritic trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, 19°55'26.0"S, 40°37'13.0"W, 05.VII.2003, fr., *T.A. Cruz et al.* 67 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Mata Fria, 08.VII.1998, fr., *L. Kollmann et al.* 178 (MBML); Santo Antônio, 09.III.1999, bud, *L. Kollmann et al.* 2049 (MBML); 31.V.2001, fr., *L. Kollmann et al.* 3799 (MBML); Reserva Biológica Augusto Ruschi, 25.IX.2001, fr., *L. Kollmann* & *E. Bausen* 4722 (MBML).

In PNMSL *Miconia dorsaliporosa* is unfrequent and was collected only once in 2003. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the dense indument on the leaf adaxial surface, which makes it not visible, glomerulate panicles and anthers dehiscing through a dorsal pore.

This species occurs in Brazil in the states of Bahia, Minas Gerais and Espírito Santo. In PNMSL it was sampled with fruits in July.

24. *Miconia dubia* (DC.) R.Goldenb., Brittonia 71(1): 94. 2019 [2018]. Fig. 4g.

= *Leandra hirta* Raddi, Quar. Piant. Nuov. Bras.: 8. 1820.

Shrubs or treelets, 0.5-4 m tall. Stems cylindrical, non-winged, moderately covered with unbranched trichomes. Petioles 0.2-1.1 cm long. Leaf blades 5.5-8.5 x 1.9-2.4 cm, membranaceous, lanceolate, discolorous when dried, base acute to cuneate, apex acute to acuminate; margins entire or crenulate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.2-1.3 cm above the base joining the midrib without domatia on the abaxial surface; both surfaces sparsely covered with unbranched trichomes, more concentrated on veins, surface visible. Inflorescence 4.8-8 cm long, glomerulate panicles, terminal. Flower pentamerous, sessile. Hypanthium 0.2-0.3 cm long, tubular, moderately covered with unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; Anthers white, dehiscing through an apical pore; connective not prolonged, dorsally thickened with a bilobate appendage in antesepalous stamens; antesepalous anthers 0.3-0.4 cm long, antepetals anthers 0.2 cm long. Ovary inferior, apex glabrous; style filiform, sigmoid, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Circuito Caravaggio, Trilha à margem esquerda da estrada principal, após a entrada da Cachoeira do Country, 866 m, 19°55'5.11"S, 40°38'36.38"W, 3.II.2020, fl., *P.M.L.A. Santos* 186 (RB); Country Club, Trilha à direita da entrada, 882 m, 19°55'25.96"S, 40°37'46.52"W, 9.III.2020, fr., *P.M.L.A. Santos* 210 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO; Ibitirama, Serra do Caparaó, fr., *L. Bacci* & *J.P.F. Zorzanelli* 45 (UPCB). Santa Maria de Jetibá, Belém, 14.I.2003, fl., *L. Kollmann et al.* 5909 (MBML); estrada de Garrafão, 15.IV.2003, fr., *L. Kollmann* & *M.V.S. Berger* 6106 (MBML). Venda Nova do Imigrante, Alto Caxixe, fl., *A.D. Mattedi et al.* 23 (MBML).

In PNMSL *Miconia dubia* occurs in Montane Ombrophilous Dense Forest. It can be recognized by the leaves with sparse, appressed trichomes, terminal inflorescences and pentamerous flowers with white petals with acute apex, and white stamens.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in January.

25. *Miconia fallacissima* (Markgr.) R.Goldenb., Brittonia 71(1): 95. 2019 [2018]. Figs. 3m,4h.

= *Leandra fallacissima* Markgr., Notizbl. Bot. Gart. Berlin-Dahlem 10: 53 (1927).

Shrubs, 1-2 m tall. Stems cylindrical, non-winged, densely covered with unbranched trichomes. Petioles 0.15-1.1 cm long. Leaf blades 7.6-10.8 x 2.1-4.8 cm, membranaceous, lanceolate, slightly discolorous when dried, base acute, apex acute; margins crenulate to denticulate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.2-0.8 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface covered with sericeous unbranched trichomes, abaxial surface densely covered with unbranched trichomes, more concentrated on veins, surface visible. Inflorescence 6.5-9.2 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.4-0.6 cm long, campanulate, densely covered with elongated unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged, dorsally thickened; anthers ca. 0.2-0.3 cm long, white, dehiscing through an apical pore. Ovary inferior, apex covered with unbranched trichomes; style filiform, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Valão de São Lourenço, Estação Biológica da Caixa D'Água, 740 m, 19°55'52.0"S, 40°37'14.0"W, 16.I.1989, fl., *D. Lorenzoni* 12 (MBML); 750 m, 19°55'53.0"S, 40°36'27.0"W, 03.II.1999, fl., *L. Kollmann et al.* 1788 (MBML); 19°55'53.0"S, 40°36'27.0"W, 11.IV.1985, fr., *H. Q. Boudet Fernandes* 1078 (MBML); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 146 (RB); Country Club, trilha à direita da cachoeira do Country, 859 m, 19°55'23.72"S, 40°38'26.62"W, 3.II.2020, fl., *P.M.L.A. Santos* 192 (RB); trilha margeando o Rio de São Lourenço, 729 m, 19°55'51.73"S, 40°36'27.39"W, 4.II.2020, fl., *P.M.L.A. Santos* & *J.P.F. Zorzanelli* 194 (RB); 19°55'53.0"S, 40°36'27.0"W, 30.V.1985, fr., *W. Boone* 495 (MBML).

Miconia fallacissima is common in PNMSL and occurs in Montane Ombrophilous Dense Forest, mostly in open areas. It can be recognized by the villose branches and leaves, and white flowers with a tomentose hypanthium and isomorphic stamens.

This species occurs in Brazil in the states of Espírito Santo and Rio de Janeiro. In PNMSL it was sampled with flowers in January, February and November and with fruits in April and May.

26. *Miconia fasciculata* Gardner, London J. Bot. 1: 533. 1842. Figs. 3n,4i.

Shrubs to trees, 1-6 m tall. Stems flat when young, then cylindrical, non-winged, covered with dendritic trichomes. Petioles 0.5-1.7 cm long. Leaf blades 9-21.2 x 4-10.1 cm, chartaceous, ovate, elliptic or lanceolate, discolorous when dried, base acute, apex acute to acuminate; margins entire to denteate, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.5-0.7 above the base, joining the midrib without domatia on the abaxial surface; adaxial surface moderately or sparsely covered with dendritic trichomes, more concentrated on veins, abaxial surface moderately covered with dendritic trichomes, more concentrated on veins, surface visible. Inflorescence 10.7-14.7 cm long, glomerulate panicles, terminal. Flowers pentamerous, sessile. Hypanthium 0.2 cm long, campanulate, densely covered dendritic trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, without appendage; anthers ca. 0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex covered with dendritic trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica de São Lourenço, 750 m, 19°55'53.0"S, 40°36'27.0"W, 03.II.1999, fr., *L. Kollmann et al.* 1776 (MBML); 19°55'53.0"S, 40°36'27.0"W, 21.VIII.2001, fr., *L. Kollmann* & *E. Bausen* 4389 (MBML); mata próxima a estrada do circuito Caravaggio, 740 m, 19°55'24.57"S, 40°37'17.14"W, 20.VII.2019, fl., *P.M.L.A. Santos* 54 & *J. Külkamp* (RB); 740 m, 19°55'24.57"S, 40°37'17.14"W, 20.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 59 (RB); 650 m, 19°55'22.2"S, 40°38'15.08"W, 21.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 70 (RB); Circuito Caravaggio, mata à margem direita da estrada principal, próximo a rampa do voo livre, 858 m, 19°54'58.97"S, 40°37'36.56.0"W, 25.VIII.2019, fl., *P.M.L.A. Santos* 108 (RB); 799 m, 19°55'20.81"S, 40°37'17.06"W, 25.XI.2019, fl., *P.M.L.A. Santos* 137 (RB); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 141 (RB); 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 155 (RB); Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da cachoeira do Country Club, 740 m, 19°55'37.14"S, 40°38'39.93"W, 5.XII.2019, fl., *P.M.L.A. Santos* 169 (RB); trilha margeando o Rio de São Lourenço, 786 m, 19°55'41.93"S, 40°36'29"W, 4.II.2020, fr., *P.M.L.A. Santos* & *J.P.F. Zorzanelli* 196 (RB).

Miconia fasciculata is common in PNMSL and occurs mostly in Montane Ombrophilous Dense Forest, but is also common in degraded areas. It can be recognized by the adaxial leaf surface sparsely covered with dendritic trichomes, terminal glomerulate panicles and flowers with petals with a rounded apex, and white stamens.

According to the "Lista Vermelha da flora brasileira" (CNCFlora 2021), this species is classified as Least Concern (LC). It occurs in Brazil in the states of Pernambuco, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in July, August, November and December and with fruits in February and August.

27. *Miconia flammea* Casar., Nov. Stirp. Bras. 10: 85. 1845. Fig. 3o.

Trees, up to 14 m tall. Stems flat when young, then cylindrical, non-winged, covered with stellate trichomes. Petioles 0.8-2.6 cm long, canaliculate. Leaf blades 5.4-18.2 x 1.9-6 cm, chartaceous, elliptic to lanceolate, discolorous when dried, base acute to cuneate, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.3-1.1 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface glabrous, abaxial surface densely covered with stellate trichomes, surface not visible. Inflorescence 11.4-18.5 cm long, glomerulate panicles, terminal. Flowers pentamerous, sessile. Hypanthium ca. 0.2 cm long, campanulate, densely covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, with a dorsal appendage; anthers ca. 0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Valão de São Lourenço, Estação Biológica da Caixa D'Água, 19°55'53.0"S, 40°36'27.0"W, 19.V.1988, fr., *H.Q. Boudet Fernandes et al.* 2500 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Alto Misterioso, 06.II.2011, fl., *M.K. Caddah et al.* 832 (MBML); Estação Biológica de Santa Lúcia, 19.I.2006, fr., *L. Kollmann* & *R. Goldenberg* 8571 (MBML); Nova Lombardia, fr., *R. Goldenberg et al.* 893 (MBML).

In PNMSL *Miconia flammea* is unfrequent and was collected only once in 1988. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the dense indument on the leaf adaxial surface, which makes it not visible, terminal glomerulate panicles, flowers with petals with a rounded apex, stamens lacking appendages, and glabrous ovary apex.

This species occurs in Brazil in the states of Bahia, Goiás, Distrito Federal, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with fruits in May.

28. *Miconia formosa* Cogn., in A.DC. & C.DC., Monogr. Phan.7: 842. 1891.

Trees, up to 14 m tall. Stems flat when young, then cylindrical, non-winged, covered with lepidote-stellate trichomes. Petioles 2.9-5.2 cm long, grooved. Leaf blades 13.6-26.2 x 5.1-11.7 cm, chartaceous, elliptic to obovate, discolorous when dried, base acute, obtuse or rounded, apex acute to acuminate; margins entire, eciliate; acrodromous veins 5+2, the inner pair suprabasal, ca. 0.4-0.7 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface glabrous, abaxial surface densely covered with lepidote-stellate trichomes, surface not visible. Inflorescence 6.6-9.7 cm long, glomerulate panicles, terminal. Flowers pentamerous or hexamerous, sessile. Hypanthium 0.2 cm long, campanulate, densely covered with lepidote stellate-trichomes. Calyx caducous; sepals inconspicuous. Petals white, apex rounded. Stamens 10-12, isomorphic; filaments glabrous; connective not prolonged, with a ventral biauriculate and a dorsal acute appendage; anthers ca. 0.2-0.3 cm long, white, dehiscing through an apical pore. Ovary inferior, apex covered with stellate trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Circuito Caravaggio, trilha à direita da entrada do Country Club, 894 m, 19°55'14.52"S, 40°37'40.69"W, 15.III.2020, *P.M.L.A. Santos* (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Castelo, Parque Estadual do Forno Grande, 18.VII.2008, fl., *R. Goldenberg et al.* 1180 (MBML). Santa Teresa, cabeceira do Rio Bonito, 15.VIII.2001, fr., *L. Kollmann et al.* 4353 (MBML); Estação Biológica de Santa Lúcia, 19.I.2006, *L. Kollmann & R. Goldenberg* 8555 (MBML); Rebio Augusto Ruschi, 26.XI.2013, fr., *L.F. Bacci* & *D.F. Lima* 110 (UPCB).

This is the first record of *Miconia formosa* in PNMSL, where it is unfrequent. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the abaxial leaf surface with prominent veins and densely covered with stellate-lepidote trichomes, which makes it not visible, glomerulate panicles and flowers with stamens lacking a prolonged connective, but this with a dorsal appendage.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled only with sterile material.

29. *Miconia ionopogon* (Mart.) R.Goldenb., Brittonia 71(1): 98. 2019 [2018]. Fig. 3p.

= *Leandra ionopogon* (Mart.) Cogn. in Mart., Fl. Bras. 14(4): 129 (1886).

Shrubs, 1-2 m tall. Stems cylindrical, non-winged, densely covered with stellate and reddish unbranched elongated trichomes. Petioles 1.6-4.6 cm long. Leaf blades (6.1)9-19.6 x (1.9)3-9.9 cm, membranaceous, ovate, discolorous when dried, base rounded, apex acute to acuminate; margins entire to repand, ciliate; 5(7)+2 acrodromous veins, the inner pair suprabasal, ca. 0.5-1.3 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces moderately covered with stellate and unbranched trichomes, more concentrated on veins, surface visible. Inflorescence 3.8-8.7 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.3-0.4 cm long, campanulate, densely covered with unbranched trichomes. Calyx persistent; sepals subulate, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged, dorsally thickened, unnapendaged; anthers ca. 0.2-0.3 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex covered with unbranched trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.L.M.A Santos* 150 (RB); 799 m, 19°55'39.32"S, 40°38'48.94"W, 4.II.2020, fr., *P.L.M.A Santos* & *J.P.F. Zorzanelli* 201 (RB). **Additional material:** BRAZIL. ESPÍRITO SANTO: Santa Teresa, Mata Fria, 02.XII.1998, fl., *L. Kollmann et al.* 1147 (MBML); Reserva Biológica Augusto Ruschi, 10.I.2002, fl., *L. Kollmann* & *E. Bausen* 5287 (MBML); 30.I.2002, fl., *L. Kollmann* & *E. Bausen* 5396 (MBML).

This is the first record of *Miconia ionopogon* in PNMSL, where it is unfrequent. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the branches densely covered with long reddish trichomes, terminal inflorescences, and pentamerous flowers with yellow stamens.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in November and with fruits in February.

30. *Miconia labiakiana* R.Goldenb. & C.V.Martin, Harvard Pap. Bot. 13(2): 225. 2008. Figs. 3q,5a.

= *Miconia plumosa* Markgr., Notizbl. Bot. Gart. Berlin-Dahlem 9: 54. 1927.

Shrubs, 1-2 m tall. Stems cylindrical, non-winged, covered with unbranched and long-stalked glandular trichomes. Petioles 1.7-6.1 cm long. Leaf blades 10.6-15.9 x 5.4-8.9 cm, membranaceous, ovate, slightly discolorous when dried, base cordate, apex acute to acuminate; margins dentate, ciliate; acrodromous veins 7+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; both surfaces covered with unbranched and long-stalked glandular trichomes, surface visible. Inflorescence 7.5-14.1 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.4-0.5 cm long, campanulate, covered with unbranched and long-stalked glandular trichomes. Calyx persistent; sepals ovate, apex rounded. Petals white, apex rounded. Stamens 10, subisomorphic; filaments glabrous; connective prolonged below the thecae, with a ventral bilobate appendage; anthers ca. 0.5-0.6 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex covered with unbranched and long-stalked glandular trichomes; style filiform, sigmoid, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Country Club, trilha à direita da entrada, 931 m, 19°55'18.35"S, 40°37'52.59"W, 9.III.2020, fl., *P.M.L.A. Santos* 206 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, 25 de Julho, 29.IV.2005, fr., *L. Kollmann et al.* 7690 (MBML); Estação Biológica de Santa Lúcia, 07.IV.2006, fl., *L. Kollmann* & *S. Krause* 8846 (MBML), 8.II.2011, fl., *R. Goldenberg et al.* 1529 (UPCB).

This is the first record of *Miconia labiakiana* in PNSML, where it is unfrequent. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the long-stalked glandular trichomes, mostly on the inflorescences, leaf blades with a cordate base, and yellow stamens.

According to the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al.* 2019), this species is threatened, classified as Endangered (EN). It is endemic to the state of Espírito Santo and in PNMSL it was sampled with flowers in March.

31. *Miconia latecrenata* (DC.) Naudin, Ann. Sci. Nat., Bot., sér. 3, 16: 239. 1851. Fig. 6a.

Shrubs to trees, 2-15 m tall. Stems cylindrical, non-winged, sparsely covered with stellate trichomes. Petioles 0.4-1.2 cm long. Leaf blades 10.4-19.3 x 3.5-5.8 cm, chartaceous, elliptic, lanceolate or ovate, concolorous when dried, base acute to attenuate, apex acute to acuminate; margins crenate, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; both surfaces glabrous or with sparse stellate trichomes, surface visible. Inflorescence 6.6-16.4 cm long, dichasial panicles, terminal and axillary. Flowers pentamerous, pedicellate. Hypanthium 0.1-0.2 cm long, campanulate, moderately covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective shortly prolonged below the thecae, with a ventral biauriculate and a dorsal acute appendage; anthers ca. 0.1 cm long, white, dehiscing through a large ventral pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, mata acima do Country Club, 19°55'28.0"S, 40°38'52.0"W, 19.XI.1985, fr., *H.Q. Boudet Fernandes* 1648 (MBML); 800 m, 19°55'26.0"S 40°37'13.0"W, 24.V.1984, fr., *J. M. Vimercat* 154 (MBML); antiga Cachoeira do Country Club, trilha ao lado esquerdo da cachoeira, 19°55'30.0"S, 40°38'11.0"W, 23.II.2014, fl., *L.C. Marinho et al.* 756 (HUEFS); trilha do Caravage, 800 m, 19°55'52.0"S, 40°37'14.0"W, 26.VIII.1998, fr., *L. Kollmann* 431 (MBML); Country Club, 680 m, 19°55'0"S, 40°37'0"W, 02.V.2019, fl., *P.M.L.A. Santos* & *C.N. Fraga* 7 (RB); mata próxima a estrada do circuito Caravaggio, 740 m, 19°55'24.57"S, 40°37'0"W, 30.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 56 (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19°55'49.05"S, 40°37'4.5"W, 22.VIII.2019, fr., *P.M.L.A. Santos* 91 (RB); Circuito Caravaggio, 858 m, 19°55'58.97"S, 40°37'36.56"W, 25.VIII.2019, fl., *P.M.L.A. Santos* 103 (RB); 858 m, 19°55'58.97"S, 40°37'36.56"W, 25.VIII.2019, fl., *P.M.L.A. Santos* 113 (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, próximo ao antigo matadouro, 730 m, 19°55'39.19"S, 40°36'13.47"W, 13.X.2019, fr., *P.M.L.A. Santos* 132 (RB); trilha margeando o Rio de São Lourenço, 792 m, 19°55'35.17"S, 40°36'57.37"W, 4.II.2020, fl., *P.M.L.A. Santos* & *J.P.F. Zorzanelli* 203 (RB).

Miconia latecrenata is common in PNMSL and occurs mostly in open and degraded areas. It can be recognized by the glabrous leaves with basal veins, terminal and axillary dichasial panicles, and white anthers dehiscing through a large ventral pore.

This species occurs in Brazil in the states of Pernambuco, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina and Rio Grande do Sul. In PNMSL it was sampled with flowers in February, May, July and August and with fruits in May, August, October and November.

32. *Miconia leafallax* R.Goldenb., Brittonia 71(1): 100. 2019 [2018]. Figs. 5b,6b.

= *Leandra fallax* (Cham.) Cogn. in Mart., Fl. Bras. 14 (4): 125 (1886).

Shrubs, 1-4 m tall. Stems cylindrical, non-winged, densely covered with unbranched and stellate trichomes. Petioles 0.7-1.5 cm long. Leaf blades 8.1-15-9 x 2-4.2 cm, membranaceous, lanceolate, slightly discolorous when dried, base acute to obtuse, apex acute to acuminate; margins crenulate, ciliate; acrodromous veins 5+2, the inner pair suprabasal, ca. 0.3-1.2 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface covered with appressed unbranched trichomes, abaxial surface densely covered with unbranched and stellate trichomes, more concentrated on veins, surface visible. Inflorescence (2.5)7.6-24.9 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.2-0.3 cm long, campanulate, densely covered with unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, unnapendaged; anthers ca. 0.2 cm long, pink, dehiscing through an apical pore. Ovary inferior, apex covered with unbranched and stellate trichomes; style filiform (straight), glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Estação Biológica da Caixa D'Água, 850 m, 19°55'53.0"S, 40°36'27.0"W, 18.XI.1998, fl. and fr. *L. Kollmann at al.* 1064 (MBML); trilha do Caravagem, 19°55'24.0"S, 40°37'13.0"W, 04.XI.2000, fl., *L. Kollmann* 3417 (MBML); mata próxima a estrada do circuito Caravaggio, 740 m, 19°55'24.57"S, 40°37'17.45"W, 20.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp 57* (RB); 650 m, 19°55'25.2"S, 40°38'15.8"W, 21.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 74 (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19°55'49.05.0"S, 40°38'4.5"W, 22.VIII.2019, fl., *P.M.L.A. Santos* 93 (RB); Circuito Caravaggio, 799 m, 19°55'20.81"S, 40°37'17.06"W, 10.X.2019, fl., *P.M.L.A. Santos* 127 (RB); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 147 (RB); 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 153 (RB); trilha à direita da entrada do Country Club, 931 m, 19°55'18.35"S, 40°37'52.59"W, 9.III.2020, fr., *P.M.L.A. Santos* 205; mata acima do Country Club, 19°55'28.0"S, 40°38'52.0"W, 19.XI.1985, fl., *W. Pizziolo* 225 (MBML).

Miconia leafallax is common in PNMSL and occurs in Montane Ombrophilous Dense Forest and degraded areas. It can be recognized by tomentose branches, leaves and inflorescences, flowers with white petals with acute apex, and pink stamens.

This species occurs in Brazil in the states of Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina and possibly in Bahia. In PNMSL it was sampled with flowers in July, August, October and November and with fruits in March and November.

33. *Miconia leamarginata* R.Goldenb., Brittonia 71(1): 101. 2019 [2018]. Fig. 6c.

= *Ossaea marginata* (Desr.) Triana, Trans. Linn. Soc. London 28(1): 147. 1871 [1872].

Subshrubs to shrubs, 1-2 m tall. Stems cylindrical, non-winged, covered with unbranched and caducous stellate trichomes. Petioles 0.7-2.2 cm long. Leaf blades 8.5-13.5 x 3-4.1 cm, chartaceous, elliptic or ovate, discolorous when dried, base acute to obtuse, apex acuminate; margins entire to crenate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.2-0.8 above the base, joining the midrib without domatia on the abaxial surface; adaxial surface covered with appressed unbranched trichomes, more concentrated in a strip in the marginal region, abaxial surface covered with unbranched and stellate trichomes, surface visible. Inflorescence 1.4-2.2 cm long, dichasial, axillary. Flowers pentamerous, pedicellate. Hypanthium 0.2-0.3 cm long, campanulate, moderately covered with unbranched and stellate trichomes. Calyx persistent; sepals linear, apex acute. Petals white to pink, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged below the thecae, without appendage; anthers ca. 0.2 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex covered with stellate trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Circuito Caravaggio, mata a beira da estrada, 858 m, 19º54'58.97"S, 40º37'36.56"W, 25.VIII.2019, fl. and fr., *P.M.L.A. Santos* 109 (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 730 m, 19º55'39.19"S, 40º36'13.47"W, 13.X.2019, fr., *P.M.L.A. Santos* 133 (RB); trilha margeando o Rio de São Lourenço, 802 m, 19º55'39.32"S, 40º38'48.94"W, 26.XI.2019, fr., *P.M.L.A. Santos* 152 (RB); 709 m, 19º55'51.73"S, 40º36'27.39"W, 4.II.2020, fr., *P.M.L.A. Santos* & *J.P.F. Zorzanelli* 195 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Parque do MBML, 24.VII.1995, fl., G.C. Vallandro 168 (MBML); Reserva Biológica Augusto Ruschi, 28.XI.2001, fl. L Kollmann et al. 5070 (MBML); Loteamento Jardim da Montanha, 23.X.1985, fl. and fr., H.Q. Boudet Fernandes 1574 (MBML).

This is the first record of *Miconia leamarginata* in PNMSL, despite being common in the area. It occurs mostly in anthropized and open areas and can be recognized by a strip of trichomes on the adaxial leaf surface, axillary inflorescences, petals with acute apex, and yellow stamens. *Miconia leamarginata* is similar to *Miconia amygdaloides* and its distinction needs attention (see comments under *M. amygdaloides*).

This species occurs in Brazil in the states of Mato Grosso do Sul, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in August and with fruits in August, October and November.

34. *Miconia lucenae* R.Goldenb. & Michelang., PeerJ: 8: e8752. 2020.

Shrubs, 0.5-1.5 m tall. Stems cylindrical, non-winged, sparsely covered with stellate trichomes when young, then glabrous. Petioles 0.8-5.5 cm long. Leaf blades 4.5-13.9 x 2.8-6 cm, membranaceous, elliptic or ovate, discolorous when dried, base cordate, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.3-0.9 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces glabrous, surface visible. Inflorescence 3.6-6.5 cm long, dichasial panicles, terminal. Flowers tetramerous, pedicellate. Hypanthium ca. 0.2 cm long, campanulate, glabrous. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute or closely rounded. Stamens 8, isomorphic; filaments glabrous; connective prolonged below the thecae, with an inconspicuous dorsal appendage; anthers ca. 0.1-0.2 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, curved, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, Country Club, 750 m, 19°55'32.0"S, 40°38'08.0"W, 22.II.1999, fr., *L. Kollmann et al.* 1973 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Reserva Biológica Augusto Ruschi, 05.II.2002, fr., *L. Kollmann et al.* 5484 (MBML), 20.II.2002, fr., *L. Kollmann et al.* 5594 (MBML); terreno do Furlani, 07.II.2011, fr., *R. Goldenberg et al.* 1525 (UPCB).

In PNMSL *Miconia lucenae* is unfrequent and was collected only once in 1999. It occurs in Montane Ombrophilous Dense Forest and can be recognized by glabrous leaves with cordate base and tetramerous flowers with yellow stamens.

This species was recently described (Goldenberg *et al.* 2020) and is endemic to the state of Espírito Santo. In PNMSL it was sampled with fruits in February.

35. *Miconia melastomoides* (Raddi) R.Goldenb., Brittonia 71(1): 104. 2019 [2018]. Figs. 5c,6d.

= *Leandra melastomoides* Raddi, Quar. Piant. Nuov. Bras.: 386. 1820.

Shrubs, 0.5-2.5 m tall. Stems cylindrical, non-winged, moderately to densely covered with unbranched trichomes. Petioles 0.7-2.7 cm long. Leaf blades 8.9-17.1 x 2.7-6.1 cm, chartaceous, lanceolate, discolorous when dried, base acute, cuneate or attenuate, apex acute; margins crenulate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.5-1.6 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface sparsely covered with appressed mainly unbranched trichomes more concentrated on veins, abaxial surface densely covered with unbranched trichomes more concentrated on veins, surface visible. Inflorescence 4.5-7.3, glomerulate panicles, terminal. Flowers hexamerous, sessile. Hypanthium 0.4-0.5 cm long, tubular, densely covered with unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 12, subisomorphic; filaments glabrous; connective dorsally prolonged below the thecae, unnapendaged or with an inconspicuous dorsal acute appendage; anthers pink, dehiscing through an apical pore, antesepals ca. 0.4 cm long, antepetals 0.3-0.4 cm long. Ovary inferior, apex densely covered with unbranched trichomes; style filiform, sigmoid, glabrous. Fruits fleshy.

Specimens analyzed: PNMSL, estrada Santa Teresa/Itarana, entrada para Circuito Caravaggio, 771-992 m, 19°55'30.0"S, 40°37'26.4"W, 9.XII.2012, fl., *J.A. Lombardi et al.* 9748 (UPCB); mata próxima a estrada do circuito Caravaggio, trilha a aproximadamente 1 quilômetro depois do início do circuito, 740 m, 19°55'24.57"S, 40°37'15.52"W, 20.VII.2019, fr., *P.M.L.A. Santos* & *J. Külkamp* 64 (RB); Circuito Caravaggio, trilha à direita da entrada do Country Club, 894 m, 19°55'14.52"S, 40°37'40.69"W, 12.III.2020, fr., *P.M.L.A. Santos* 213 (RB); 894 m, 19°55'14.52"S, 40°37'40.69"W, 12.III.2020, fl., *P.M.L.A. Santos* 218 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, 30.V.2000, fr., *M. Alves et al.* 1933 (NY); Reserva Biológica de Santa Lúcia, 15.II.2011, fr., *M. Reginato et al.* 1205 (UPCB, NY).

Miconia melastomoides is common in PNMSL and occurs mainly in Montane Ombrophilous Dense Forest, but also can be found in degraded areas. It can be recognized by the hexamerous sessile flowers with bracteoles, petals and sepals red when fruiting, and pink anthers. *Miconia melastomoides* is very similar to *Miconia pubistyla*, and in this work was adopted the distinction proposed by Reginato (2016), with *M. pubistyla* presenting larger anthers, trichomes, flowers and fruits, and a conspicuous, dorsal caudate appendage in the connectives.

This species occurs in Brazil in the states of Ceará, Pernambuco, Bahia, Goiás, Distrito Federal, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in March and December and with fruits in March and August.

36. *Miconia octopetala* Cogn. in A.DC. & C.DC., Monogr. Phan. 7: 754. 1891. Figs. 5d,6e.

Trees, up to 16 m tall. Stems flat when young, then cylindrical, non-winged, covered with dendritic trichomes. Petioles 2.4-4.7 cm long, canaliculate. Leaf blades 9.5-22.9 x 2.1-16.3 cm, coriaceous, lanceolate elliptic or large elliptic, discolorous when dried, base acute to cuneate, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface moderately covered with dendritic trichomes, abaxial surface densely covered with dendritic trichomes, surface not visible. Inflorescence 7.5-12.1 cm long, glomerulate panicles, terminal. Flowers octamerous, sessile. Hypanthium 0.3-0.5 cm long, campanulate, densely covered with dendritic trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex truncate. Stamens 16, isomorphic; filaments glabrous; connective not prolonged below the thecae, with a ventral bilobate appendage; anthers ca. 0.3-0.4 cm long, yellow, dehiscing through an apical pore. Ovary inferior, apex glabrous; style straight, glabrous; stigma capitate. Fruits fleshy.

Specimens analyzed: PNMSL, mata adjacente ao parque Natural Municipal de São Lourenço, próximo a área urbana do município, dentro de condomínio residêncial, 796 m, 19°55'24.9"S, 40°36'20.4"W, 24.VIII.2019, fl., *P.M.L.A. Santos et al.* 100 (RB); 19°55'26.0"S, 40°37'13.0"W, 11.VIII.2003, fl., *T.A. Cruz et al.* 68 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, São Lourenço, 09.IX.1998, fr., *L. Kollmann et al.* 488 (MBML), 30.IX.1998, fr., *L. Kollmann et al*. 649 (MBML); Santo Antônio, 31.V.2001, fl., *L. Kollmann et al.* 3800 (MBML); Reserva Biológica Augusto Ruschi, 19.IX.2002, fl., *R.R. Vervloet et al.* 1013 (MBML).

In PNMSL *Miconia octopetala* occurs in Montane Ombrophilous Dense Forest and can be recognized by the large, coriaceous leaves with basal veins, the abaxial surface densely covered with dendritic trichomes and octamerous flowers.

According to the "Lista Vermelha da flora brasileira" (CNCFlora 2021), this species was classified as Least Concern (LC). It occurs in Brazil in the states of Bahia, Espírito Santo and Rio de Janeiro. In PNMSL it was sampled with flowers in August.

37. *Miconia paniculata* (Mart. & Schrank ex DC.) Naudin, Ann. Sci. Nat., Bot., sér. 3, 16: 245. 1851. Figs. 5e,6f.

Shrubs to trees, 2-9 m tall. Stems cylindrical, non-winged, sparsely covered with stellate trichomes. Petioles 0.3-1.9 cm long. Leaf blades 6.2-10.6 x 1.4-4.1 cm, membranaceous, elliptic, slightly discolorous when dried, base acute to attenuate, apex acuminate; margins entire to repand, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.2-0.7 cm above the base, seldom basal, joining the midrib with marsupiform domatia on the abaxial surface; both surfaces glabrous, sometimes with sparse stellate trichomes, surface visible. Inflorescence 3.8-7.4 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.2 cm long, campanulate, covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, with an acute dorsal appendage; anthers ca. 0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, divisa com terreno do Cortelleti, 19°55'52.0"S, 40°37'14.0"W, 10.V.2003, fr., *A.P. Fontana* & *R.R. Vervloet* 591 (MBML); Estação Biológica Caixa D'Água, trilha do Caravagem, 750 m, 19°55'53.0"S, 40°36'27.0"W, 29.XII.1998, fl., *L. Kollmann* & *E. Bausen* 1383 (MBML); Country Club, 750 m, 19°55'32.0"S, 40°38'08.0"W, 22.II.1999, fr., *L. Kollmann et al.* 1969 (MBML); 750 m, 19°55'32.0"S, 40°38'08.0"W, 22.II.1999, fl., *L. Kollmann* 1974 (MBML); trilha margeando o Rio de São Lourenço, 767 m, 19°55'44.82"S, 40°36'33.99"W, 4.II.2020, fr., *P.M.L.A. Santos* & *J.P.F. Zorzanelli* 199 (RB); trilha à direita da entrada do Country Club, 882 m, 19°55'25.96.0"S, 40°37'46.52"W, 9.III.2020, fr., *P.M.L.A. Santos* 209 (RB); 894 m, 19°55'14.52"S, 40°37'40.69"W, 12.III.2020, fr., *P.M.L.A. Santos* 214 (RB); Estação Biológica Caixa D'Água, 19°55'53.0"S, 40°36'27.0"W, 03.II.2000, fr., *V. Demuner et al.* 708 (MBML).

In PNMSL *Miconia paniculata* is common and occurs in Montane Ombrophilous Dense Forest. It can be recognized by the glabrous leaves with marsupiform domatia and anthers dehiscing through a small apical pore.

Miconia paniculata occurs in Brazil in the states of Bahia, Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in February and December and with fruits in February, March and May.

38. Miconia pectinata (Cogn.) R.Goldenb., Brittonia 71(1): 108. 2019[2018]. Fig. 6g.

= *Leandra amplexicaulis* DC., Prodr. 3: 153 (1828).

Shrubs, 0,5-2 m tall. Stems cylindrical, non-winged, densely covered with appressed unbranched trichomes. Petioles absent or up to 0.2 cm long. Leaf blades 15-3-29.8 x 4.3-8.4 cm, chartaceous, lanceolate, slightly discolorous when dried, base amplexicaulous, apex acute to acuminate; margins entire or crenate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 2.2-4 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces sparsely covered with appressed unbranched trichomes, surface visible. Inflorescence 7-10.5 cm long, glomerulate panicles, terminal. Flowers hexamerous, sessile. Hypanthium 0.2-0.4 cm long, tubular, densely covered with unbranched trichomes, eglandular or glandular. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 12, subisomorphic; filaments glabrous; connective prolonged below the thecae, with a dorsal acute appendage in the antesepalous; anthers pink, dehiscing through an apical pore, antesepalous ca. 0.3 cm long, antepetalous ca. 0.2 cm long. Ovary inferior, apex covered with unbranched trichomes; style filiform, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, 800 m, 19°55'26.0"S, 40°37'13.0"W, 24.IV.1984, fr., *J. M. Vimercat* 153 (MBML); Estação Biológica Caixa D'Água, 750 m, 19°55'53.0"S, 40°36'27.0"W, fl., 03.II.1999, *L. Kollmann et al.* 1774 (MBML); Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da Cachoeira do Country, 845 m, 19°55'17.86"S, 40°37'35.97"W, 3.II.2020, fr., *P.M.L.A. Santos* 180 (RB); trilha margeando o Rio de São Lourenço, 779 m, 19°55'42.24"S, 40°36'40.68"W, 4.II.2020, fl., *P.M.L.A. Santos* 202 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, São Lourenço, Mata Fria, 25.VI.1998, fl., *L. Kollmann et al.* 141 (MBML).

In PNMSL *Miconia pectinata* occurs in Montane Ombrophilous Dense Forest and is easily recognized by the amplexicaulous leaves, flowers with petals with an acute apex, and fleshy fruits.

This species occurs in Brazil in the states of Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in February and with fruits in April.

39. *Miconia polyandra* Gardner, London J. Bot. 2: 346–347. 1843.

Shrubs to trees, 2-11 m tall. Stems cylindrical, non-winged, covered with stellate trichomes. Petioles 0.4-1.1 cm long. Leaf blades 4.6-17.6 x 2.4-4.6 cm, membranaceous, elliptic, slightly discolorous when dried, base cuneate to obtuse, apex acute to acuminate; margins entire, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface covered with stellate trichomes when young, then glabrous, abaxial surface glabrous or sparsely covered with stellate trichomes, surface visible. Inflorescence 4.9-8.4 cm long, scorpioid panicles, terminal. Flowers pentamerous, sessile. Hypanthium ca. 0.2-0.3 cm long, campanulate, covered with stellate trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, with a biauriculate ventral appendage; anthers ca. 0.2-0.3 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style straight, glabrous; stigma capitate. Fruits fleshy.

Specimens analysed: PNMSL, Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da Cachoeira do Country, 865 m, 19°54'58.88"S, 40°37'39.85"W, 3.II.2020, fl., *P.M.L.A. Santos* 181 (RB); 866 m, 19°55'5.11"S, 40°38'36.38"W, 3.II.2020, fl., *P.M.L.A. Santos* 185 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa: Estação Biológica de Santa Lúcia, 28.I.1997, fr., *G. Hupp et al.* 67 (MBML); São Lourenço, Mata Fria, 13.II.2001, fl., *L. Kollmann* 3560 (MBML); 23.II.1999, fr., *L. Kollmann et al.* 2022 (MBML); 850 m, 17.VI.1999, fr., *L. Kollmann et al.* 2622 (MBML).

Miconia polyandra, despite being common in PNMSL, was collected for the first time in this work. It occurs mostly in open and degraded areas. It can be recognized by the glabrous or glabrescent leaves with basal veins and scorpiod panicles.

According to the "Lista Vermelha da flora brasileira" (CNCFlora 2021), this species is classified as Least Concern (LC). It occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in February.

40. *Miconia pubistyla* (Wurdack) R.Goldenb., Brittonia 71(1): 110. 2019 [2018]. Figs. 5f,6h.
= *Leandra glazioviana* Cogn. in Mart., Fl. Bras. 14(4): 86. 1886.

Shrubs, 0.9-2 m tall. Stems cylindrical, densely covered with unbranched erect trichomes. Petioles 0.1-1.3 cm long. Leaf blades 8.8-15.1 x 2.9-4.2 cm, chartaceous, lanceolate, discolorous when dried, base acute, cuneate or attenuate, apex acute; margins crenulate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0-4-1.6 cm above the base, joining the midrib without domatia on the abaxial surface; adaxial surface sparsely covered with appressed unbranched trichomes more concentrated on veins, abaxial surface densely covered with unbranched trichomes more concentrated on veins, surface visible. Inflorescence 5,6-10.4 cm long, glomerulate panicles, terminal. Flowers hexamerous, sessile. Hypanthium ca. 0.5-0.6 cm long, tubular, densely covered with unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 12, subisomorphic; filaments glabrous; connective prolonged below the thecae, with dorsal caudate appendage; anthers pink, dehiscing through an apical pore, antesepalous 0.5-0.6 cm long, antepetalous 0.4-0.5 cm long. Ovary inferior, apex densely covered with unbranched trichomes; style sigmoid, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, trilha principal, 19°55'52.0"S, 40°37'14.0"W, 20.III.2002, fr., *A.P. Fontana* & *R.R. Vervloet* 308 (MBML); Country Club, 850 m, 19°55'32.0"S, 40°38'08.0"W, 15.XII.1998, fl., *L. Kollmann et al. 1307* (MBML); No Country Clube, na trilha atrás da cachoeira, 12.IV.2003, fl., *M.J.G. Andrade et al.* 231 (HUEFS) ; trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 144 (RB); 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 145 (RB); trilha à direita da entrada do Country Club, 882 m, 19°55'25.96"S, 40°37'46.52"W, 9.III.2020, fr., *P.M.L.A. Santos* 212 (RB); afloramento rochoso próximo à estrada do Circuito Caravaggio, 894 m, 19°55'14.52"S, 40°37'40.69"W, 12.III.2020, fl., *P.M.L.A. Santos* 217 (RB); 894m, 19°55'14.52"S, 40°37'40.69"W, 12.III.2020, fl., *P.M.L.A. Santos* 219 (RB); 800 m, 19°55'26.0"S, 40°37'13.0"W, 24.V.1984, fl., *W.A. Hoffmann* 120 (MBML).

Miconia pubistyla is common in PNMSL and occurs mainly in Montane Ombrophilous Dense Forest. It can be recognized by the hexamerous, sessile flowers with bracteoles, petals and sepals turning to red when fruiting, and pink anthers. It is very similar to *Miconia melastomoides* and the distinction between them needs attention (see comments under *M. melastomoides*).

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. In PNMSL it was sampled with flowers in March, May, November and December and with fruits in March.

41. *Miconia pusilliflora* (DC.) Naudin, Ann. Sci. Nat., Bot., sér. 3, 16(2): 171–172. 1851.

Shrubs to trees, 2-19 m tall. Stems cylindrical, non-winged, covered with stellate trichomes. Petioles 0.5-1.7 cm long. Leaf blades 6.6-10.4 x 2-3.6 cm, chartaceous, elliptic or lanceolate, discolorous when dried, base acute, attenuate or decurrent, apex caudate; margins entire to repand, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.3-0.8 above the base, joining the midrib with marsupiform domatia on the abaxial surface; adaxial surface sparsely covered with stellate trichomes, abaxial surface moderately covered with stellate trichomes, surface visible. Inflorescence 3.5-7.2 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium ca. 0.1 cm long, campanulate, covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, without appendage; anthers ca. 0.1-0.2 cm long, white, dehiscing through a longitudinal ventral slit, covering the whole thecae. Ovary inferior, apex covered with stellate trichomes; style filiform, straight, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, 19°55'26.0"S, 40°37'13.0"W, 5.IV.2003, fl., *T.A. Cruz et al.* 55 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa: Estação Biológica de Santa Lúcia, 14.IV.1994, fl., *L.D. Thomaz* 820 (MBML), 25.VII.1991, fl., *W. Pizziolo et al.* 376 (MBML); Rio Saltinho, 31.V.1984, fr., *W.A. Hoffmann* 126 (MBML).

Despite being common in the municipality, *Miconia pusilliflora* is unfrequent in PNMSL and was collected only once in 2003. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the leaves with the inner pair of veins suprabasal, joining the midrib with marsupiform domatia on the abaxial surface, and white stamens with anthers dehiscing through a ventral slit.

This species occurs in Brazil in the states of Pernambuco, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina and Rio Grande do Sul. In PNMSL it was sampled with flowers in April.

42. *Miconia refracta* (Cogn.) R.Goldenb., Brittonia 71(1): 111 2019 [2018]. Fig. 6i.

= *Leandra refracta* Cogn. in Mart., Fl. Bras. 14(4): 186. 1886.

Shrubs, 0.5-1 m tall. Stems cylindrical, non-winged, moderately covered with unbranched trichomes in young branches and glabrescent in the olders. Petioles 0.3-0.4 cm long. Leaf blades 3.8-9.3 x 1.6-3.3 cm, membranaceous, ovate, concolorous or slightly discolorous when dried, base rounded, apex acuminate; margins entire to crenate, ciliate; acrodromous veins 5+2, the inner pair suprabasal, ca. 0.4-0.5 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces covered with whitish unbranched trichomes, more concentrated on abaxial surface veins, surface visible. Inflorescence 7.4-10.4 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium ca. 0.3 cm long, tubular, sparsely covered with unbranched trichomes. Calyx persistent; sepals subulate, apex acute. Petals white, apex acute. Stamens 10, isomorphic; filaments glabrous; connective not prolonged, unnapendaged; anthers ca. 0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S 40°37'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 149 (RB); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 157 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Estação Biológica de Santa Lúcia, 07.XI.1985, fl., *H.Q. Boudet Fernandes* 1600 (MBML, UPCB).

Miconia refracta is unfrequent in PNMSL and was collected for the first time in this work. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the leaves with unbranched trichomes, mostly concentrated on the petiole and midrib, pentamerous flowers and white stamens.

This species occurs in Brazil in the states of Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina. In PNMSL it was sampled with flowers in November.

43. *Miconia robusta* Cogn. in Mart., Fl. Bras. 14(4): 270, 611. 1887. Fig. 6j.

Shrubs, 2-3 m tall. Stems sub-cylindrical, non-winged, covered with stellate and dendritic trichomes. Petioles absent or up to 0.5 cm long. Leaf blades 28.3-41.7 x 11.5-18.9 cm, coriaceous, obovate, discolorous when dried, base attenuate, apex rounded, obtuse or acute; margins entire, revolute; acrodromous veins 3+2, the inner pair suprabasal, ca. 3.1-6.5 above the base, joining the midrib without domatia on the abaxial surface; adaxial surface glabrescent with stellate trichomes on veins, abaxial surface densely covered with stellate trichomes, surface not visible. Inflorescence 18.1-21.6 cm long, glomerulate panicles, terminal. Flowers pentamerous, sessile. Hypanthium ca. 0.2-0.3 cm long, campanulate, covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae with an inconspicuous dorsal appendage; anthers ca. 0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, 19°55'52.0"S, 40°37'14.0"W, 24.V.1984, fr., *J.M. Vimercat* 152 (MBML); Estação Biológica Caixa D'Água, estrada do Caravagem, 850 m, 19°55'53.0"S, 40°36'27.0"W, 18.XI.1998, fl., *L. Kollmann et al.* 1062 (MBML); 750 m, 19°55'53.0"S, 40°36'27.0"W, 29.XII.1998, fr., *L. Kollmann* & *E. Bausen* 1388 (MBML); mata próxima a estrada do circuito Caravaggio, 740 m, 19°55'24.57"S, 40°37'17.5"W, 20.VII.2019, fr., *P.M.L.A. Santos* & *J. Külkamp* 62 (RB); 858 m, 19°54'58.97"S, 40°37'36.56"W, 25.VIII.2019, fl., *P.M.L.A. Santos* 110 (RB); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019, fl., *P.M.L.A. Santos* 158 (RB); 799 m, 19°55'39.32"S, 40°38'48.94"W, 4.II.2019, fr., *P.M.L.A. Santos* & *J.P.F. Zorzanelli* 200 (RB).

In PNMSL, *Miconia robusta* occurs in Montane Ombrophilous Dense Forest near river banks. It can be recognized by large leaves (more than 25 cm when mature) with inner pair of veins joining the midrib more than 2.5 cm above the base and glomerulate inflorescences.

According to the "Lista Vermelha da flora brasileira" (CNCFlora 2021), this species is classified as Least Concern. It occurs in Brazil in the states of Minas Gerais, Espírito Santo, Rio de Janeiro and São Paulo. In PNMSL it was sampled with flowers in November, with buds in August and with fruits in February, May, August and December.

44. *Miconia sellowiana* Naudin, Ann. Sci. Nat., Bot., sér. 3, 16: 206. 1851. Figs. 5g,6k.

Trees, 6-11 m tall. Stems cylindrical, non-winged, covered with stellate trichomes, decorticant when mature. Petioles 0.6-1.1 cm long. Leaf blades 8.3-13.8 x 2.5-3.5 cm, membranaceous, elliptic to lanceolate, concolorous when dried, base acute to attenuate, apex acuminate to caudate; margins entire or slightly dentate, eciliate; acrodromous veins 3+2, the inner pair mostly suprabasal, ca. 0.1-1 cm above the base, joining the midrib with marsupiform domatia on the abaxial surface; both surfaces sparsely covered with stellate trichomes when young, then glabrous, surface visible. Inflorescence 2.5-6.6 cm long, dichasial panicle, terminal. Flowers pentamerous, pedicellate. Hypanthium ca. 0.1 cm long, campanulate, covered with stellate trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex glabrous. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, with an inconspicuous ventral biauriculate appendage; anthers ca. 0.1 cm long, white, dehiscing through a ventral apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, Circuito Caravaggio, mata à margem direita da estrada principal, próximo a rampa do voo livre, 19°54'58.97"S, 40°36'27.0"W, 25.VIII.2019, fl., *P.M.L.A. Santos* 111 (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19°55'49.05"S, 40°38'04.5"W, 09.X.2019, fl. *P.M.L.A. Santos* 123 (RB); 730 m, 19°55'39.19"S, 40°36'13.47"W, 13.X.2019, fl., *P.M.L.A. Santos* 131 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Estação Biológica de Santa Lúcia, 14.X.1994, fl., *L.D. Thomaz* 850 (MBML); São Lourenço, Mata Fria, 25.VII.1998, fr., *L. Kollmann et al.* 131 (MBML); Santo Antônio, 29.X.1988, fl., *L. Kollmann et al.* 852 (MBML).

In PNMSL *Miconia sellowiana* occurs in Montane Ombrophilous Dense Forest and can be recognized by the glabrous or glabrescent leaves with the inner pair of veins joining the midrib with marsupiform domatia on the abaxial surface, and white stamens with anthers dehiscing through a large ventral apical pore.

This species occurs in Brazil in the states of Goiás, Distrito Federal, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina and Rio Grande do Sul. In PNMSL it was sampled with flowers in August and October.

45. *Miconia setosociliata* Cogn. in A.DC. & C.DC., Monogr. Phan. 7: 843. 1891.

Trees, 3-6 m tall. Stems flat when young, then cylindrical, non-winged, densely covered with stellate trichomes. Petioles 0.5-1.2 cm long. Leaf blades 7.1-11.4 x 2-3.4 cm, membranaceous, lanceolate, discolorous, base acute, apex acuminate; margins dentate, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.3-0.5 above the base, joining the midrib with marsupiform domatia on the abaxial surface; adaxial surface glabrous, abaxial surface densely covered with stellate trichomes, surface not visible. Inflorescence 7.8-9 cm long, scorpioid panicles, terminal. Flowers pentamerous, sessile. Hypanthium ca. 0.1-0.2 cm long, campanulate, densely covered with stellate and short-stalked glandular trichomes. Calyx caducous; sepals triangular, apex acute. Petals white, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, with a ventral biauriculate and a dorsal acute appendage; anthers ca. 0.1-0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style straight, glabrous; stigma capitate. Fruits fleshy.

Specimens analysed: PNMSL, VIII.2006, fr., *J.M.L. Gomes* 3105 (UPCB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Estação Biológica de Santa Lúcia, 02.IX.2005, fr., *L. Kollmann* 8288 (MBML); 20.VIII.1986, *R. Goldenberg et al.* 377 (UPCB); Nova Lombardia, 15.V.1985, fl., *W. Boone* 446 (MBML).

In PNMSL, *Miconia setosociliata* is known by only one specimen with an inaccurate location, collected in 2006. It can be recognized by the leaves with marsupiform domatia on the abaxial surface, ciliate margins and inflorescences with scorpioid branching.

According to the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al.* 2019) and with the "Lista Vermelha da flora brasileira" (CNCFlora 2021), this species is threatened, and classified as Vulnerable (VU). It occurs in Brazil in the states of Minas Gerais, Espírito Santo, Rio de Janeiro and São Paulo. In PNMSL it was sampled with fruits in August.

46. *Miconia strigilliflora* (Naudin) R.Goldenb., Brittonia 71(1): 114. 2019 [2018]. Fig. 5h.
= *Leandra strigilliflora* (Naudin) Cogn. in Mart., Fl. Bras. 14 (4): 126 (1886).

Shrubs, 1-2 m tall. Stems cylindrical, non-winged, sparsely covered with appressed unbranched trichomes. Petioles 0.7-8 cm long. Leaf blades 6.5-14.9 x 2.9-8.8 cm, membranaceous, ovate, concolorous, base cuneate to obtuse, apex acuminate; margins entire, ciliate; acrodromous veins 5+2, the inner pair suprabasal, ca. 0.5-1.7 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces sparsely covered with appressed unbranched trichomes, more concentrated on veins, surface visible. Inflorescence 7.4-9.3 cm long, dichasial panicles, terminal. Flowers pentamerous, pedicellate. Hypanthium 0.2-0.3 cm long, campanulate, moderately covered with appressed unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white at anthesis, then pink, apex rounded, slightly acuminate. Stamens 10, subisomorphic; filaments glabrous; connective not prolonged below the thecae, unnapendaged; anthers pink or white at anthesis, dehiscing through an apical pore, antesepalous ca. 0.4 cm long, antepetalous ca. 0.2-0.3 cm long. Ovary inferior, apex glabrous; style filiform, sigmoid, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, trilha velutina, 19°55'52.0"S, 40°37'14.0"W, 01.III.2003, fr., *A. P. Fontana* 510 (MBML); Country Club, 19°55'32.0"S, 40°38'08.0"W, 26.I.2006, fl., *L. Kollmann* 8624 (MBML); trilha margeando o Rio de São Lourenço, 802 m, 19°55'39.32"S, 40°38'48.94"W, 26.XI.2019 fl., *P.M.L.A. Santos* 151 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa: Vale do Canaã, 04.XII.1985, fl., *J. M. Vimercat* 325 (MBML).

In PNMSL *Miconia strigilliflora* occurs in Montane Ombrophilous Dense Forest. It can be recognized by the leaves with suprabasal lateral veins, moderately covered with appressed trichomes, and flowers with white petals with acute apex.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro and São Paulo. In PNMSL it was sampled with flowers in January and November and with fruits in March.

47. *Miconia suprabasalis* (R.Goldenb. & Reginato) R.Goldenb., Brittonia 71(1): 115. 2019 [2018].

= *Ossaea suprabasalis* R.Goldenb. & Reginato, Brittonia 59(4): 339–342. 2007.

Shrubs, 1-3 m tall. Stems cylindrical, non-winged, glabrous or sparsely covered with sessile glands. Petioles 0.9-2.7 cm long. Leaf blades 6.2-14.1 x 2.9-5.9 cm, membranaceous, elliptic to oboval, discolorous when dried, base attenuate to decurrent, apex acuminate; margins entire, ciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.6-2.0 above the base, joining the midrib without domatia on the abaxial surface, both surfaces glabrous or with scattered sessile glandular trichomes, surface visible. Inflorescence 2.2-6.3 cm long, dichasial panicles, axillary. Flowers tetramerous or pentamerous, pedicellate. Hypanthium ca. 0.2 cm long, campanulate, densely covered with unbranched inconspicuous trichomes. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 8-10, isomorphic; filaments glabrous; connective not prolonged below the thecae, unnapendaged; anthers ca. 0.1-0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analysed: PNMSL, estrada do Caravage, 750 m, 19°55'53.0"S, 40°36'27.0"W, 27.X.1998, fl., *L. Kollmann et al.* 806 (MBML, UPCB); Estação Biológica Caixa D'Água, 850 m, 19°55'53.0"S, 40°36'27.0"W, 18.XI.1998, fl., *L. Kollmann et al.* 1065 (MBML); 750 m, 19°55'53.0"S, 40°36'27.0"W, 29.XII.1998, fr., *L. Kollmann* & *E. Bausen* 1376 (MBML); 750 m, 19°55'53.0"S, 40°36'27.0"W, 03.II.1999, fr., *L. Kollmann et al.* 1784 (MBML); 19°55'53.0"S, 40°36'27.0"W, 8.XII.1999, fl., *V. Demuner* & *E. Bausen* 290 (MBML).

In PNMSL *Miconia suprabasalis* is unfrequent and has not been collected since 1999. It occurs in Montane Ombrophilous Dense Forest and can be recognized by the leaves sparsely covered with sessile glands, axillary inflorescences, petals with acute apex, and white stamens.

This species occurs in Brazil in the states of Minas Gerais and Espírito Santo. In PNMSL it was sampled with flowers in October, November and December and with fruits in December and February.

48. *Miconia tristis* Spring, Flora 20(2, Beibl.): 76. 1837.

Shrubs to trees, 1-8 m tall. Stems cylindrical, non winged, glabrous. Petioles 0.6-1.3 cm long. Leaf blades 7-11.5 x 2.7-4 cm, membranaceous, elliptic, concolorous when dried, base acute to attenuate, apex acuminate; margins entire, repand or slightly dentate, eciliate; acrodromous veins 3+2, the inner pair suprabasal, ca. 0.2-1 cm above the base, joining the midrib without domatia on the abaxial surface; both surfaces glabrous, surface visible. Inflorescence 2.6-7.7 cm long, dichasial panicles, terminal and axillary. Flowers pentamerous, pedicellate. Hypanthium ca. 0.1-0.2 cm long, campanulate, covered with stellate trichomes. Calyx caducous; sepals triangular, apex rounded. Petals wihte, apex rounded. Stamens 10, isomorphic; filaments glabrous; connective prolonged below the thecae, with a ventral biauriculate and a dorsal acute appendages; anthers ca. 0.1-0.2 cm long, white, dehiscing through an apical pore. Ovary inferior, apex glabrous; style filiform, straight, glabrous. Fruits fleshy.

Specimens analysed: São Lourenço, Mata fria, Terreno de C. Loss, 850 m, 7.IV.1999, fl., *L. Kollmann et al.* 2416 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Reserva Biológica Augusto Ruschi, 09.V.2002, fl., *R.R. Vervloet et al.* 251 (MBML), 22.IV.2003, fl., *R.R. Vervloet et al.* 2269 (MBML); Valsugana Velha, 08.VIII.2000, fr., *V. Demuner et al.* 1346 (MBML); 22.IV.2003, fr., *R.M. Pizziolo* 98 (MBML).

Miconia tristis have not been collected inside the PNMSL, but it occurs in adjoining areas and is common in the municipality. It can be recognized by the glabrous leaves with basal veins, terminal and axillary dichasial panicles, and white anthers dehiscing through a small apical pore.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina.

49. *Microlicia parviflora* (D.Don) Versiane & R.Romero, Bot. J. Linn. Soc., boab011: 20. 2021. Fig 7a.

=*Trembleya parviflora* (D. Don) Cogn. in Mart., Fl. Bras.14(3): 127. 1883.

Shrubs to trees, 2-4 m tall. Stems cylindrical, covered with sessile glands and elongated unbranched trichomes. Petioles 0.5-1.1 cm long. Leaf blades 2.4-5.6 x 0.7-1.9 cm, chartaceous, lanceolate, discolorous, base acute, apex acute, obtuse or rounded; margins entire, eciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface glabrous or sparsely covered with sessile glands, abaxial surface covered with sessile glands and elongated unbranched trichomes, surface visible. Inflorescence 1-1.9 cm long, dichasial, axillary. Flowers pentamerous, pedicellate. Hypanthium 0.2-0.3 cm long, campanulate, covered with sessile glands and elongated unbranched trichomes. Calyx persistent; sepals triangular, apex acute. Petals white to pink, apex rounded. Stamens 10, heteromorphic; filaments glabrous; connective prolonged below the thecae with a bilobate appendage in the antesepalous, unnapendaged in the antepetalous; anthers dehiscing through an apical pore; antesepalous ca. 0.8 cm long, violet, antepetalous ca. 0.3 cm long yellow. Ovary superior, apex glabrous; style filiform, sigmoid, glabrous. Fruits capsular.

Specimens analysed: PNMSL, mata próxima a estrada do circuito Caravaggio, 650 m, 19°55'22.2"S, 40°38'15.08"W, 21.VII.2019, fl., *P.M.L.A. Santos* & *J. Külkamp* 72 (RB); mata do Country Club, 858 m, 19°55'25.2"S, 40°38'15.00"W, 11.X.2019, fl. and fr., *P.M.L.A. Santos* 128 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Goiapaba-Açu, 4.V.2006, fl., *L. Kollmann* & *S. Krauser* 9012 (MBML); Reserva Biológica Augusto Ruschi, 25.IV.2002, fl., *R.R. Vervloet* & *E. Bausen* 212 (MBML); 24.IV.2002, fl., *R.R. Vervloet et al.* 295 (MBML); 4.VI.1985, fl., *W. Boone* 524 (MBML).

In PNMSL, *Microlicia parviflora* occurs on rocky outcrops and can be recognized by the axillary inflorescences, violet antesepalous anthers, yellow antepetalous anthers, and dry fruits.

This species occurs in Brazil in the states of Bahia, Goiás, Distrito Federal, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo and Paraná. In PNMSL it was sampled with flowers in July and October and with fruits in October.

50. *Mouriri chamissoana* Cogn. in Mart., Fl. Bras.14(4): 573. 1888.

Trees, 4-10 m tall. Stems quandrangular, winged when young, glabrous, decorticant when mature. Petioles 0.1-0.2 cm long. Leaf blades 2.6-3.4 x 6.7-8.9 cm, coriaceous, elliptic to lanceolate, concolorous, base rounded to cordate, apex acute to acuminate; margins entire, eciliate; brochidodromous veins, without domatia on abaxial surface; both surfaces glabrous, surface visible. Inflorescence sessile, ramiflorous fascicles. Flowers pentamerous, pedicellate. Hypanthium ca. 0.2 cm long, campanulate, glabrous. Calyx persistent; sepals triangular, apex acute. Petals white, apex acute. Stamens 10, subisomorphic; filaments glabrous; anthers 0.1-0.2 cm long, yellow, with a dorsal gland, dehiscing through an apical slit; connective prolonged below the thecae, with a dorsal rounded appendage. Ovary inferior, apex glabrous; style filiform, curved, glabrous. Fruits fleshy.

Specimens analysed: São Lourenço, Mata fria, Terreno de C. Loss, 700 m, 14.X.1998, *L. Kollmann et al.* 748 (MBML).

Additional material: BRAZIL. BAHIA; Ilhéus, Mata da Fazenda Ipiranga, 15.X.1972, fl., *D.P. Lima* 13087 (UPCB). PARANÁ: Morretes, PARNA Saint-Hilaire/Lange, 11.XII.2017, fl., *R.R. Voltz et al.* 1967 (UPCB). SANTA CATARINA: Itapoá, Reserva Volta Velha, 14.XI.2019, fl., *M. Grings* & *A.S. Mello* 1955 (FLOR).

Mouriri chamissoana has not been collected inside the PNMSL, but it occurs in an adjoining area and, therefore, has been included here as a possible occurrence. It can be recognized by the leaves with brochidodromous venation, ramiflorous inflorescences, anthers with dorsal glands, and fleshy fruits.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina.

51. *Pleroma arboreum* Gardner, London J. Bot. 2: 351. 1843. Figs. 6l,7b.

= *Tibouchina arborea* (Gardner) Cogn. in Mart., Fl. Bras.14(3): 299. 1885.

Trees, 4-25 m tall. Stems quadrangular, covered with appressed estrigose trichomes. Petioles 1.2-4.5 cm long. Leaf blades 7.1-11.8 x 2.8-4.1 cm, coriaceous, lanceolate, concolorous, base acute to obtuse, apex acute; margins entire, eciliate; 5 acrodromous veins, external pair joining above the base, the inner pair basal, joining the midrib without domatia on the abaxial surface; both surfaces covered with short appressed estrigose trichomes, more concentrated on abaxial surface veins, surface visible. Inflorescence 7.5-8.7 cm long, botryoid, terminal. Bracteoles cucullate, forming a calyptra, apex rounded. Flowers pentamerous, pedicellate. Hypanthium 0.7-1.1 cm long, campanulate, densely covered with elongated unbranched trichomes. Calyx caducous; sepals ovate, apex rounded. Petals purple, pink or white, apex truncate. Stamens 10, heteromorphic; filaments covered with unbranched trichomes; connective prolonged below the thecae, with a bilobate appendage covered with glandular trichomes; anthers lilac or white, dehiscing through an apical pore; antesepalous 1.2-1.4 cm long, antepetalous 1-1.1 cm long. Ovary superior, partially adhered to hypanthium through the septa, apex covered with unbranched trichomes; style filiform, sigmoid, covered with unbranched trichomes on the basal half. Fruits capsular.

Specimens analysed: PNMSL, Country Club, trilha à direita da cachoeira do Country, 852 m, 19°55'23.72"S, 40°38'16.62"W, 3.II.2020, fl., *P.M.L.A. Santos* 191 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, morro da antena da TELEST, 06.IV.1985, fl., *H.Q. Boudet Fernandes* 1587 (MBML); Valsugana Velha, 24.X.1994, fl., *C. Chamas* 55 (MBML); Estação Biológica de Santa Lúcia, 12.I.1995, fl., *C. Chamas et al.* 363 (MBML); Reserva Biológica Augusto Ruschi, 4.XII.2001, fl., *L. Kollmann* & *E. Bausen* 5125 (UPCB).

Despite being common in PNMSL, *Pleroma arboreum* was collected for the first time in this work. It occurs in Montane Ombrophilous Dense Forest, mainly in degraded areas, and can be recognized by the cucullate bracteoles, and stamens with filaments covered with long, unbranched trichomes.

This species occurs in Brazil in the states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro and São Paulo. In PNMSL it was sampled with flowers in February.

52. *Pleroma boudetii* (P.J.F. Guim. & R.Goldenb.) P.J.F.Guim. & Michelang., Taxon 68(5): 975. 2019. Figs. 6m,7c.

= *Tibouchina boudetii* P.J.F.Guim. & R.Goldenb., Kew Bull. 56(4): 989. 2001.

Trees, 5-19 m tall. Stems sub-cylindrical, non-winged, covered with dendritic trichomes. Petioles 0.5-1.4 cm long. Leaf blades 4.3-8.2 x 1.1-2.2 cm, chartaceous, lanceolate, discolorous when dried, base acute to obtuse, apex acute; margins entire, eciliate; acrodromous veins 3+2, the inner pair basal, without domatia on the abaxial surface; both surfaces covered with dendritic trichomes, these denser on abaxial surface, surface visible. Inflorescence 3.3-8.4 cm long, botryoid, terminal. Bracteoles ovate, apex acute. Flowers pentamerous, pedicellate. Hypanthium 0.6-0.9 cm long, campanulate, densely covered with stellate trichomes. Calyx caducous; sepals lanceolate, apex acute. Petals purple, apex truncate. Stamens 10, subisomorphic; filaments covered with glandular trichomes; connective prolonged below the thecae, with a bilobate ventral appendage, glabrous; anthers purple, dehiscing through an apical pore, antesepalous 0.9-1.1 cm long, antepetalous 0.5-0.7 cm long. Ovary basally adhered to hypanthium, apex covered with stellate trichomes; style filiform, sigmoid, glabrous. Fruits capsular.

Specimens analysed: PNMSL, mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19°55'49.05"S, 40°38'04.5"W, 9.X.2019, fl., *P.M.L.A. Santos* 122 (RB); mata adjacente ao Parque Natural Municipal de São Lourenço, próximo a área urbana do município, 705 m, 19°55'49.05"S, 40°38'04.5"W, 30.I.2020, fl., *P.M.L.A. Santos* 179 (RB); Circuito Caravaggio, Trilha à direita da entrada do Country Club, 894 m, 19°55'14.52"S, 40°37'40.69"W, 12.III.2020, fl., *P.M.L.A. Santos* 215 (RB); 19°55'26.0"S, 40°37'13.0"W, 9.VIII.2003, fl., *T.A. Cruz* 59 (MBML).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Vargem Alta, 28.I.1986, fl., *H.Q. Boudet Fernandes* 1809 (MBML); 12.XI.1985, fr., *W. Piziolo* 195 (MBML); morro da estação receptora de TV, 13.I.1986, fl., *W. Boone* 1013 (MBML); 24.I.1986, fl., *W. Boone* 1049 (MBML).

In PNMSL, *Pleroma boudetii* occurs in Montane Ombrophilous Dense Forest with an open canopy, on sandy soil. It can be recognized by both leaf surfaces covered with stellate trichomes, early caducous, long sepals, and stamens with filaments covered with glandular trichomes.

According to the "Livro das Espécies Ameaçadas do Espírito Santo" (Fraga *et al.* 2019) and with the "Lista Vermelha da flora brasileira" (CNCFlora 2021), this species is threatened, and classified as Vulnerable (VU). It is endemic to the state of Espírito Santo and in PNMSL it was sampled with flowers in January, March, August and October.

53. *Pleroma clidemioides* O. Berg ex Triana, Trans. Linn. Soc. London 28(1): 43. 1871 [1872]. Fig. 7d.

= *Tibouchina clidemioides* (O. Berg ex Triana) Cogn. in Mart., Fl. Bras. 14(3): 398. 1885.

Shrubs, 1-2 m tall. Stems quadrangular, winged when mature, covered with unbranched elongated trichomes. Petioles 0.8-1.4 cm long. Leaf blades 4.4-9 x 1.9-5.6 cm, membranaceous, ovate to lanceolate, discolorous when dried, base rounded to cordate, apex acute; margins entire, ciliate; acrodromous veins 3+2, the inner pair basal, without domatia on the abaxial surface; both surfaces covered with elongate unbranched trichomes, surface visible. Inflorescence 5.8-9.8 cm long, dichasial panicles, terminal. Bracteoles lanceolate, apex acute. Flowers pentamerous, pedicellate. Hypanthium 0.5-0.6 cm long, tubular, moderately covered with long-stalked glandular trichomes. Calyx caducous; sepals lanceolate, apex acute. Petals purple, apex truncate. Stamens 10, heteromorphic; filaments covered with glandular trichomes; connective prolonged below the thecae with a bilobate ventral appendage, glabrous; anthers purple, dehiscing through an apical pore, antesepalous 0.5-0.7 cm long, antepetalous 0.4-0.6 cm long. Ovary superior, partially adhered to hypanthium through the septa, apex covered with unbranched trichomes; style filiform, sigmoid, glabrous. Fruits capsular.

Specimens analysed: Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da Cachoeira do Country, 866 m, 19°55'5.11"S, 40°38'36.38"W, 3.II.2020, fl., *P.M.L.A. Santos* 183 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Estação Biológica de Santa Lúcia, 13.III.1990, fl., *H.Q. Boudet Fernandes et al.* 2901 (US); encosta atrás do bairro Dois Pinheiros, 18.II.1986, fl., *W. Boone* 1103 (US).

This is the first record of *Pleroma clidemioides* in PNMSL, where it is unfrequent. It occurs in open or degraded areas. It can be recognized by the shrub habit, and hypanthium and filaments covered with glandular trichomes.

This species occurs only in the states of Minas Gerais and Espírito Santo. In PNMSL it was sampled with flowers in February.

54. *Pleroma estrellense* (Raddi) P.J.F.Guim. & Michelang., Taxon 68(5): 979. 2019. Fig. 6n, 7e.

= *Tibouchina estrellensis* (Raddi) Cogn. in Mart., Fl. Bras. 14(3): 342. 1885.

Trees, 4-20 m tall. Stems quadrangular, winged, covered with dendritic trichomes. Petioles 0.8-1.5 cm long. Leaf blades 4.3-10.3 x 0.9-3.8 cm, chartaceous, lanceolate, discolorous, base rounded to obtuse, apex acute; margins entire, eciliate; acrodromous veins 5, the inner pair basal, with the external pair joining above the base, without domatia on the abaxial surface; adaxial surface covered with appressed estrigose trichomes, branched at the base or not, abaxial surface densely covered with elongated trichomes with stellate base, surface visible. Inflorescence 5.9-11.1 cm long, dichasial panicles, terminal. Bracteoles lanceolate, apex acute. Flowers pentamerous, pedicellate. Hypanthium 0.6-0.8 cm long, tubular, densely covered with simple and dendritic trichomes. Calyx caducous; sepals lanceolate, apex acute. Petals purple, apex truncate. Stamens 10, heteromorphic; filaments densely covered with unbranched trichomes; connective prolonged below the thecae, with a bilobate ventral appendage, glabrous; anthers purple, dehiscing through an apical pore, antesepalous 0.8-1.4 cm long, antepetalous 0.5-1.2 cm long. Ovary superior, partially adhered to hypanthium through the septa, apex densely covered with unbranched trichomes; style filiform, sigmoid, covered with unbranched trichomes on the basal half. Fruits dry capsules.

Specimens analysed: PNMSL, Caravaggio, rampa de parapente, 19°54'31.0"S, 40°39'08.0"W, 21.V.2008, fl., *L. Kollmann et al.* 11030 (MBML); Circuito Caravaggio, 680 m, 19°55'0.0"S, 40°37'0.0"W, 2.V.2019, fl., *P.M.L.A. Santos* & *C.N. Fraga* 4 (RB); trilha margeando o Rio de São Lourenço, 680 m, 19°55'42.24"S, 40°37'40.68"W, 2.V.2019, fl., *P.M.L.A. Santos & J.P.F. Zorzanelli 198* (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, Museu de Biologia Mello Leitão, 25.II.1997, fl., *E.C. Brito* 22 (MBML); 16.IV.2016, fl., *F.S.Meyer* 2222 (MBML); 9.IV.1986, fl., *W. Boone* 1129 (MBML).

In PNMSL *Pleroma estrellense* occurs in Montane Ombrophilous Dense Forest and can be recognized by the tree habit, plane bracteoles (not cucullate) and stamens with the filaments covered with unbranched trichomes.

Pleroma estrellense is very similar to *P. fissinervium*. Guimarães (1997) distinguished both by the adaxial leaf surface covered with trichomes with a branched base in *P. estrellense,* and an unbranched base in *P. fissinervium*. Here we chose to recognize a single species, sinces the individuals found in the area have intermediate states for the character described above.

This species occurs in the states of Minas Gerais, Espírito Santo, Rio de Janeiro and São Paulo. In PNMSL it was sampled with flowers in May.

55. *Pleroma heteromallum* (D.Don) D.Don, Mem. Wern. Nat. Hist. Soc. 4: 295. 1823. Fig. 6o.

= *Tibouchina heteromalla* (D. Don) Cogn. in Mart., Fl. Bras. 14(3): 336. 1885.

Shrubs, 1-3 m tall. Stems quadrangular, winged, covered with unbranched trichomes. Petioles 1.2-1.9 cm long. Leaf blades 10.2-16.8 x 4.1-9.3 cm, chartaceous, ovate, slightly discolorous when dried, base rounded to cordate, apex rounded, obtuse or acute; margins entire, ciliate; acrodromous veins 5+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface densely covered with appresed elongated unbrached trichomes, abaxial surface densely covered with unbranched smooth trichomes, more concentrated on veins, surface visible. Inflorescence 7.5-20.7 cm long, dichasial panicles, terminal. Bracteoles lanceolate, apex acute. Flowers pentamerous, pedicellate. Hypanthium 0.3-0.5 cm long, tubular, densely covered with appressed unbranched trichomes. Calyx caducous; sepals lanceolate, apex acute. Petals purple or lilac, with the base white or reddish, or white with the base reddish, apex truncate. Stamens 10, subisomorphic; filaments covered with glandular trichomes; connective prolonged below the thecae, with a ventral bilobate appendage, covered with glandular trichomes; anthers white, dehiscing through an apical pore, antesepalous 0.2-0.3 cm long, antepetalous 0.1-0.2 cm long. Ovary basally adhered to hypanthium, apex covered with unbranched trichomes; style filiform, sigmoid, with the basal half covered with unbranched trichomes. Fruits capsular.

Specimens analysed: PNMSL, Circuito Caravaggio, 680 m, 19°55'0.0"S, 40°37'0.0"W, 2.V.2019, fl., *P.M.L.A. Santos* & *C.N. Fraga* 2 (RB); margem de estrada próxima ao circuito Caravaggio, 600 m, 19°55'22.12"S, 40°37'15.08"W, 21.VII.2019, fr., *P.M.L.A. Santos* & *J. Külkamp* 76 (RB); Circuito Caravaggio, trilha à margem esquerda da estrada principal, após a entrada da cachoeira do Country Club, 837 m, 19°55'37.14"S, 40°38'39.93"W, 05.XII.2019, fl., *P.M.L.A. Santos* 167 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, 15.IV.2005, *A.P. Fontana* 1318 (MBML); 4.V.1988, *H.Q. Boudet Fernandes* 2468 (MBML); 19.III.1994, *C. Chamas* 136 (MBML); 4.IV.2005, *A.P. Fontana* 1255 (MBML).

In PNMSL, *Pleroma heteromallum* occurs mostly in open areas, but can also be found cultivated on local properties. It can be recognized by the abaxial leaf surface with evident reticulate venation, flowers usually with bicolored petals and stamens with the filaments covered with glandular trichomes.

This species occurs in Brazil in the states of Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro and São Paulo. In PNMSL it was sampled with flowers in May and December and with fruits in July.

56. *Pleroma radula* (Markgr.) P.J.F.Guim. & Michelang., Taxon 68(5): 987. 2019. Figs. 6p,7f.

= *Tibouchina radula* Markgr., Notizbl. Bot. Gart. Berlin-Dahlem 10(91): 49. 1927.

Shrubs, 1-2 m tall. Stems quadrangular, moderately covered with appressed roughened conic trichomes. Petioles 0.6-2.1 cm long. Leaf blades 1.7-9.1 x 1.4-4.3 cm, chartaceous, elliptic to lanceolate, concolorous or slightly discolorous when dried, base acute, apex rounded, obtuse or acute; margins entire, ciliate; acrodromous veins 3+2, the inner pair basal, joining the midrib without domatia on the abaxial surface; adaxial surface densely covered with bulla-based estrigose trichomes, abaxial surface covered with stellate base appressed trichomes, these roughest on veins, surface visible. Inflorescence 20-27.6 cm long, dichasial panicles, terminal. Bracteoles lanceolate, apex acute. Flowers pentamerous, pedicellate. Hypanthium 0.4-0.6 cm long, tubular, covered with appressed unbranched trichomes. Calyx caducous; sepals lanceolate, apex acute. Petals purple, apex truncate. Stamens 10, heteromorphic; filaments covered with glandular trichomes; connective prolonged below the thecae, covered with glandular trichomes on the antesepalous, glabrous in the antepetalous, unnapendaged; anthers white, dehiscing through an apical pore, antesepalous 0.3-0.5 long, antepetalous 0.2-0.3 cm long, glabrous. Ovary basally adhered to hypanthium, apex covered with unbranched trichomes; style filiform, sigmoid, with the basal half covered with unbranched trichomes. Fruits capsular.

Specimens analysed: PNMSL, mata adjacente ao parque Natural Municipal de São Lourenço, próximo a área urbana do município, dentro de condomínio residêncial, 796 m, 19°55'24.9"S, 40°36'20.24"W, 24.VIII.2019, fr., *P.M.L.A. Santos* 101 (RB); afloramento rochoso próximo à estrada do Circuito Caravaggio, 894 m, 19°55'14.52"S, 40°37'40.59"W, 12.III.2020, fl., *P.M.L.A. Santos* 216 (RB).

Additional material: BRAZIL. ESPÍRITO SANTO: Santa Teresa, 11.IV.2008, *L. Kollmann* 11028 (MBML), 22.III.2007, *L. Kollmann* 9568 (MBML), 6.II.2002, *L. Kollmann* 5531 (MBML).

In PNMSL, *Pleroma radula* is unfrequent and was collected for the first time in this work. It occurs on rocky outcrops and can be recognized by the abaxial leaf surface with appressed, roughened, unbranched trichomes, more concentrated on the veins, and stamens with filaments covered with glandular trichomes.

This species is endemic to the state of Espírito Santo and in PNMSL it was sampled with flowers in March and with fruits in August.

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Figure 1 Map of the "Parque Natural Municipal de São Lourenço", including the buffer zone.

Figure 2 Melastomataceae species from "Parque Natural Municipal de São Lourenço", Santa Teresa, Espírito Santo, Brazil. a. *Aciotis paludosa* — Flowering branches. b. *Acisanthera variabilis* — Flowering branches. c-d. *Bertolonia ruschiana* — c. fruit branches; d. flowering branches. e. *Chaetogastra sebastianopolitana* — Flowering branches. f. *Henriettea glabra* — Flowering branches. g. *Meriania tetramera* — Flowering branches. Photos: Claudio Nicoletti de Fraga (a, b, c, e, f, g) and Pedro Martin Lischinsky Alves dos Santos (d).

Figure 3 Leaf abaxial surfaces of Melastomataceae species from "Parque Natural Municipal de São Lourenço", Santa Teresa, Espírito Santo, Brazil – a. *Chaetogastra sebastianopolitana*; b. *Miconia albicans*; c. *Miconia atlantica*; d. *Miconia capixaba*; e. *Miconia cinnamomifolia*; f. *Miconia corcovadensis*; g. *Miconia crenata*; h. *Miconia cristata*; i. *Miconia cubatanensis*; j. *Miconia dasytricha*; k. *Miconia debilis*; l. *Miconia diffusa*; m. *Miconia fallacissima*; n. *Miconia fasciculata*; o. *Miconia flammea*; p. *Miconia ionopogon*; q. *Miconia labiakiana*. (a. *P.M.L.A. Santos* 2; b. *P.M.L.A. Santos* & *J. Külkamp* 63; c. *P.M.L.A. Santos et al.* 86; d. *P.M.L.A. Santos* 90; e. *T.A. Cruz et al.* 60; f. *P.M.L.A. Santos* 159; g. *P.M.L.A. Santos* & *J. Külkamp* 65; h. *R. Goldenberg et al.* 2643; i. *T.A. Cruz et al.*

69; j. *P.M.L.A. Santos* 140; k. *P.M.L.A. Santos 106*; l. *P.M.L.A. Santos* 130; m. *P.M.L.A. Santos* 146; n. *P.M.L.A. Santos* & *J. Külkamp* 70; o. *R. Goldenberg et al.* 893; p. *P.L.M.A Santos* 150; q. *P.M.L.A. Santos* 206).

Figure 4 Melastomataceae species from "Parque Natural Municipal de São Lourenço", Santa Teresa, Espírito Santo, Brazil. a. *Miconia capilliflora* — Flowering branches. b. *Miconia corcovadensis* — Flowering branches. c. *Miconia crenata* — Flowering branches. d. *Miconia cuneatissima* — Flowering branches. e. *Miconia dasytricha* — Flowering branches. f. *Miconia dodecandra* — Flowering branches. g. *Miconia dúbia* — Flowering branches. h. *Miconia fallacissima* — Flowering branches. i. *Miconia fasciculata* — Flowering branches. Photos: Claudio Nicoletti de Fraga (e, i), Josimar Külkamp (c) e Pedro Martin Lischinsky Alves dos Santos (a, b, d, f, g, h).

Figure 5 Melastomataceae species from "Parque Natural Municipal de São Lourenço", Santa Teresa, Espírito Santo, Brazil. a. *Miconia labiakiana* — Flowering branches. b. *Miconia leafallax* — Flowering branches. c. *Miconia melastomoides* — Flowering branches. d. *Miconia octopetala* — Flowering branches. e. *Miconia paniculata* — domatia detail on the abaxial surface. f. *Miconia pubistyla* — Flowering branches. g. *Miconia sellowiana* — Flowering branches. h. *Miconia strigilliflora* — Flowering branches. Photos: Claudio Nicoletti de Fraga (a, b), Josimar Külkamp (c, e) and Pedro Martin Lischinsky Alves dos Santos (d, f, g, h).

Figure 6 Leaf abaxial surfaces of Melastomataceae species from "Parque Natural Municipal de São Lourenço", Santa Teresa, Espírito Santo, Brazil. – a. *Miconia latecrenata*; b. *Miconia leafallax*; c. *Miconia leamarginata*; d. *Miconia melastomoides*; e. *Miconia octopetala*; f. *Miconia paniculata*; g. *Miconia pectinata*; h. *Miconia pubistyla*; i. *Miconia refracta*; j. *Miconia robusta*; k. *Miconia sellowiana*; l. *Pleroma arboreum*; m. *Pleroma boudetii*; n. *Pleroma estrellense*; o. *Pleroma heteromallum*; p. *Pleroma radula*. (a. *P.M.L.A. Santos* 91;

b. *P.M.L.A. Santos* & *J. Külkamp* 74; c. *P.M.L.A. Santos* 109; d. *P.M.L.A. Santos* & *J. Külkamp* 64; e. *P.M.L.A. Santos et al.* 100; f. *P.M.L.A. Santos* 214; g. *P.M.L.A. Santos* 180; h. *P.M.L.A. Santos* 145; i. *P.M.L.A. Santos* 157; j. *P.M.L.A. Santos* 110; k. *P.M.L.A. Santos* 111; l. *P.M.L.A. Santos* 191; m. *P.M.L.A. Santos* 122; n. *P.M.L.A. Santos* & *C.N. Fraga* 4; *P.M.L.A. Santos* 167; *P.M.L.A. Santos* 101).

Figure 7 Melastomataceae species from "Parque Natural Municipal de São Lourenço", Santa Teresa, Espírito Santo, Brazil. a. *Microlicia parviflora* — Flowering branches. b. *Pleroma arboreum* — Flowering branches. c. *Pleroma boudetii* — Flowering branches. d. *Pleroma clidemioides* — Flowering branches. e. *Pleroma estrelense* — Flowering branches. f. *Pleroma radula* — Flowering branches. Photos: Claudio Nicoletti de Fraga (e, f), Josimar Külkamp (a) and Pedro Martin Lischinsky Alves dos Santos (b, c, d).

Figure 1

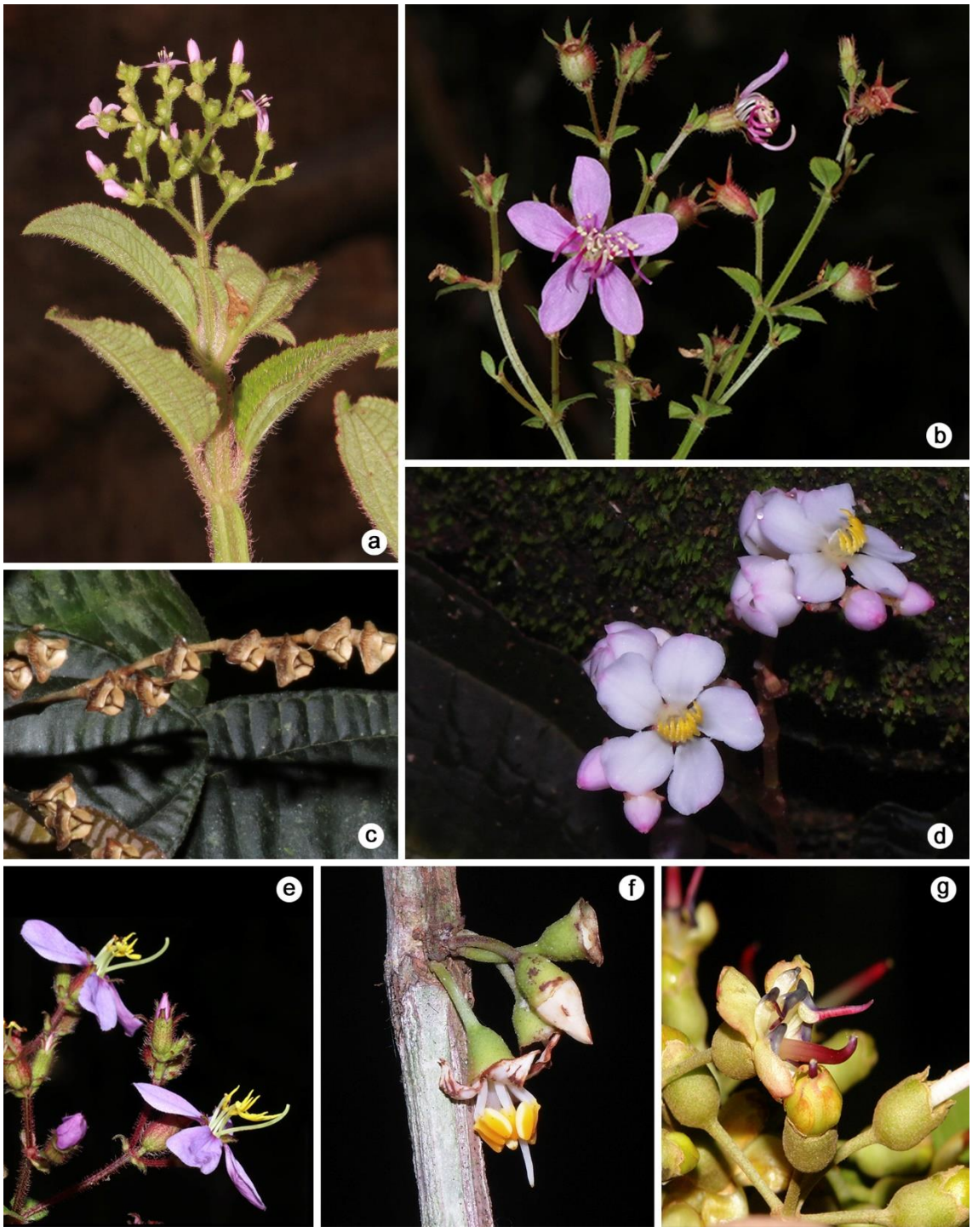
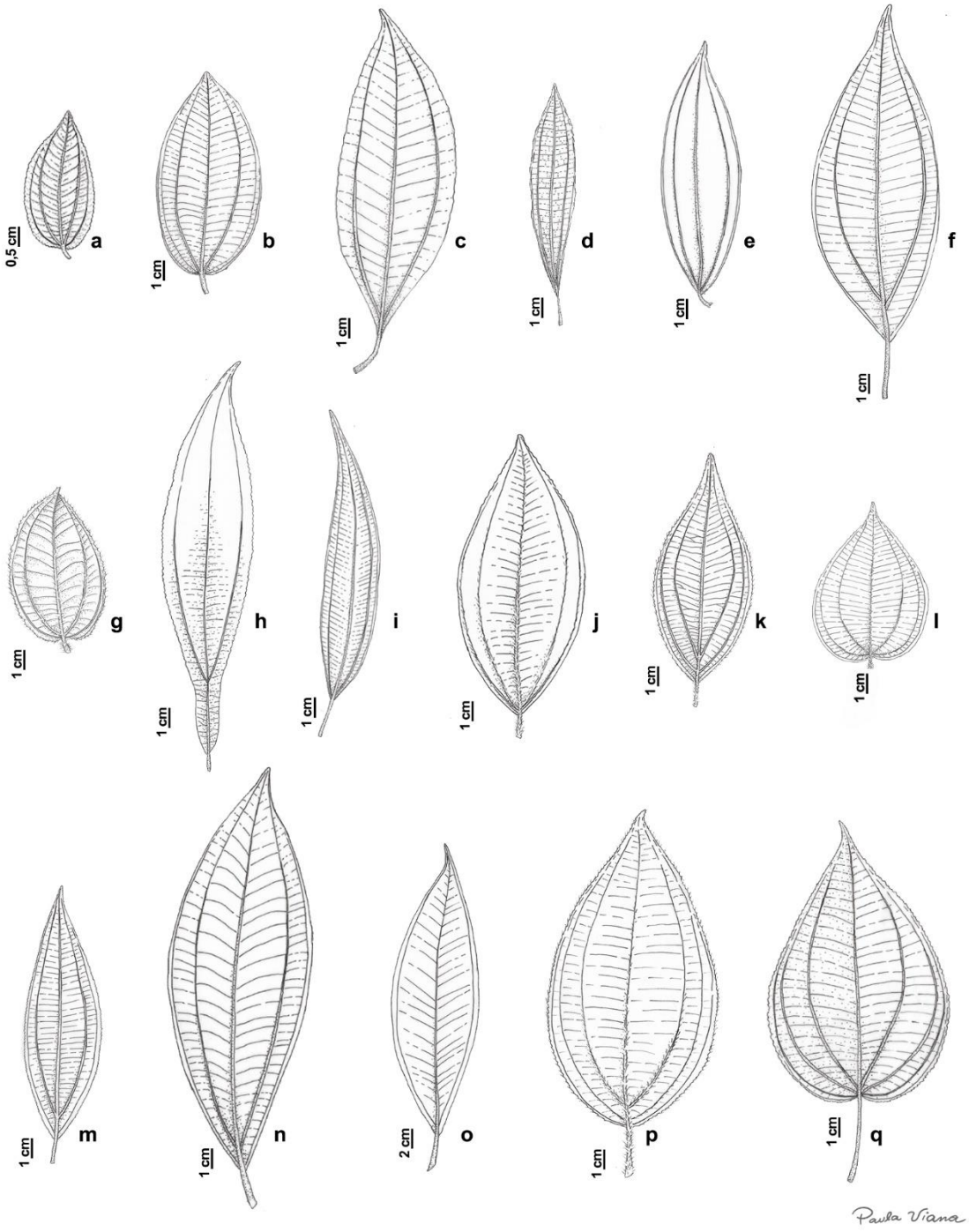


Figure 2.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Paula Viana

Figure 3.

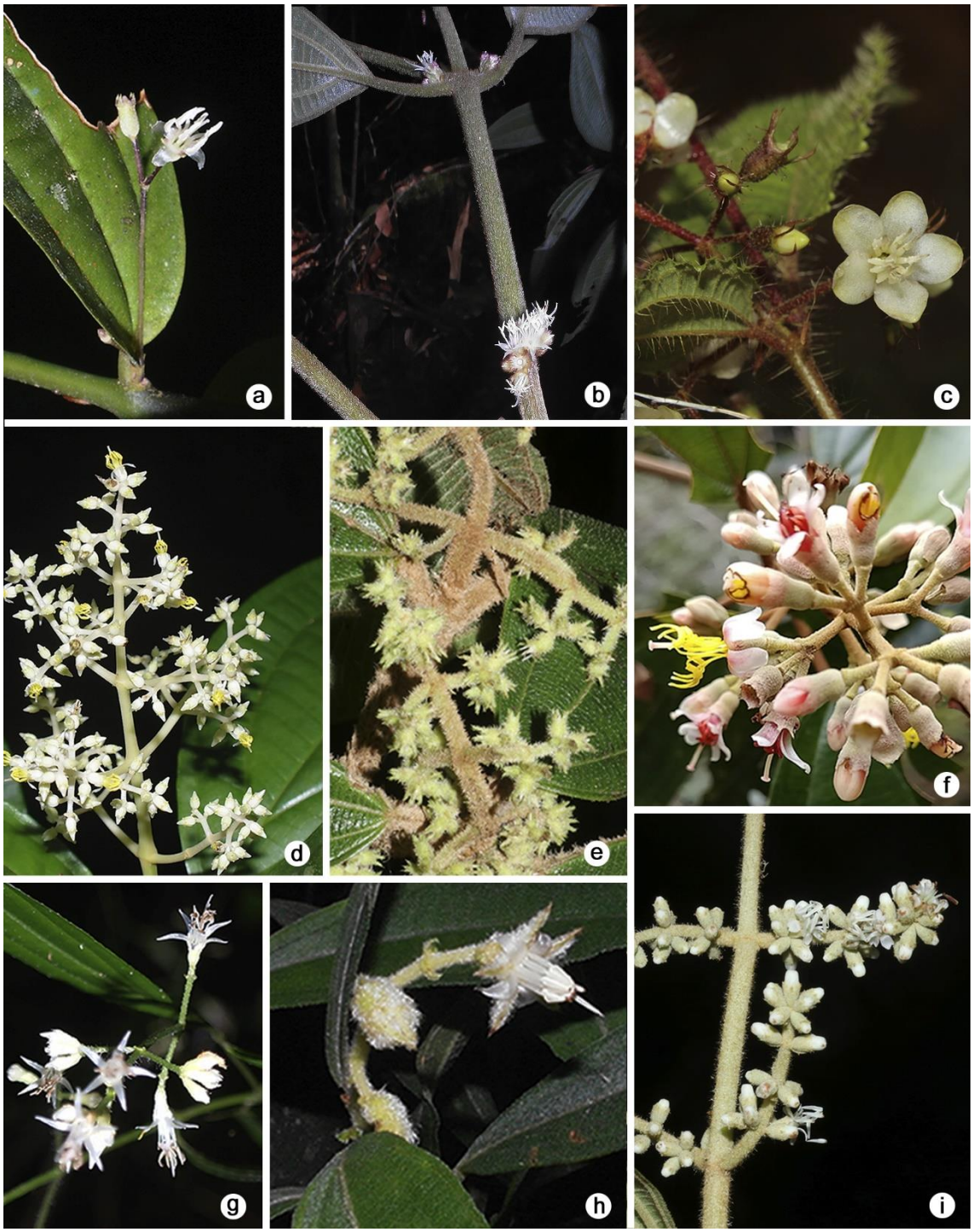

Figure 4.

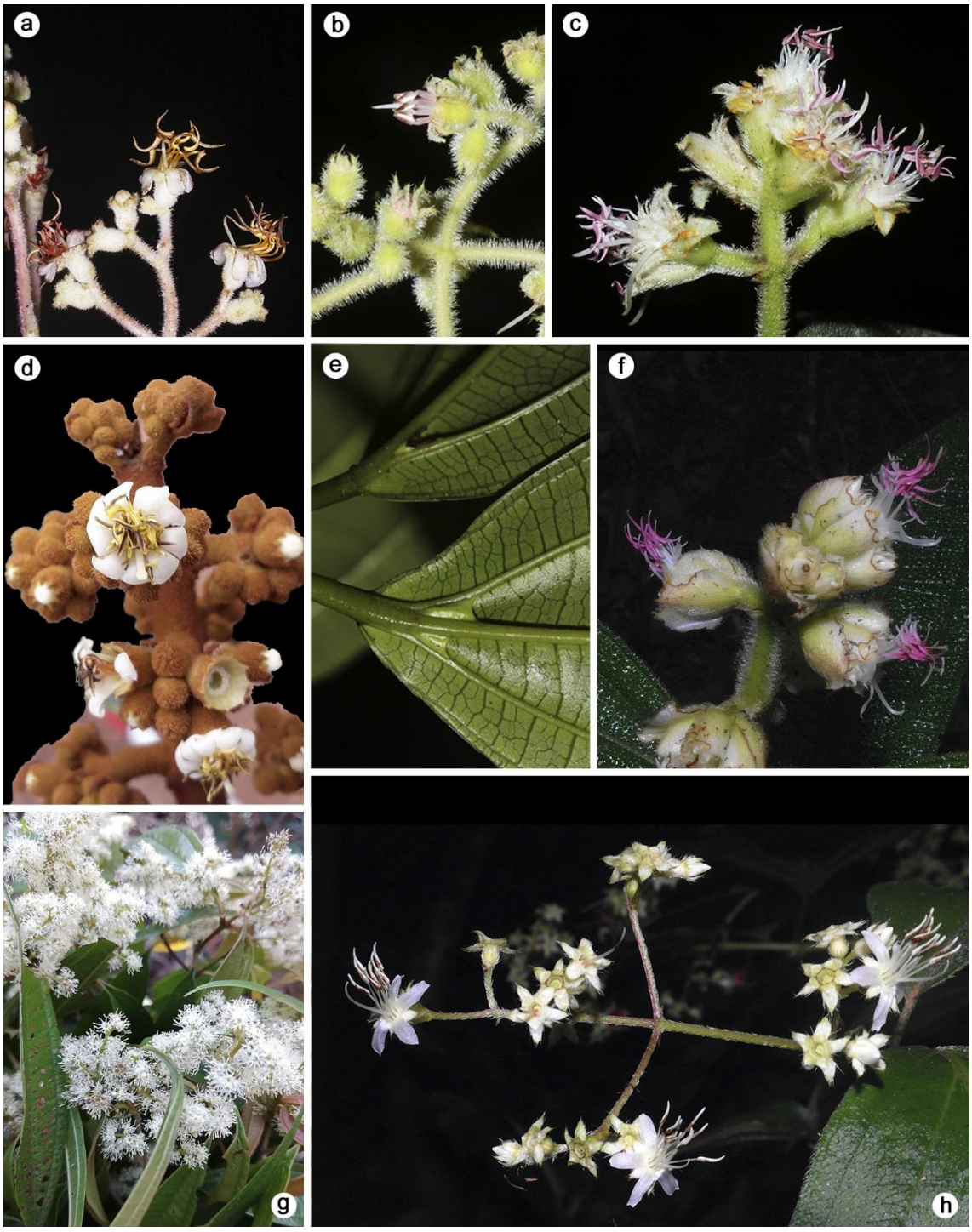

Figure 5.

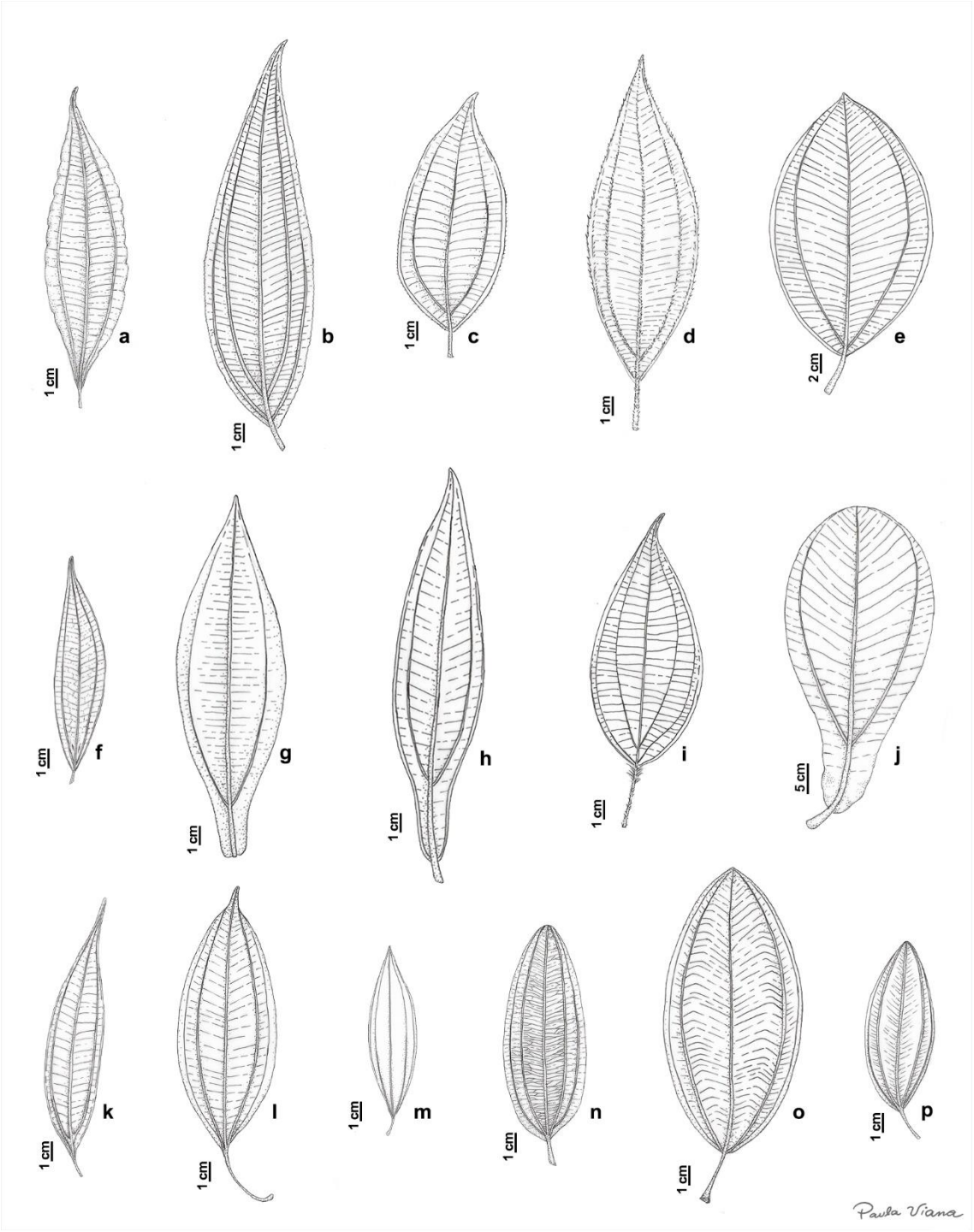
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Figure 6.

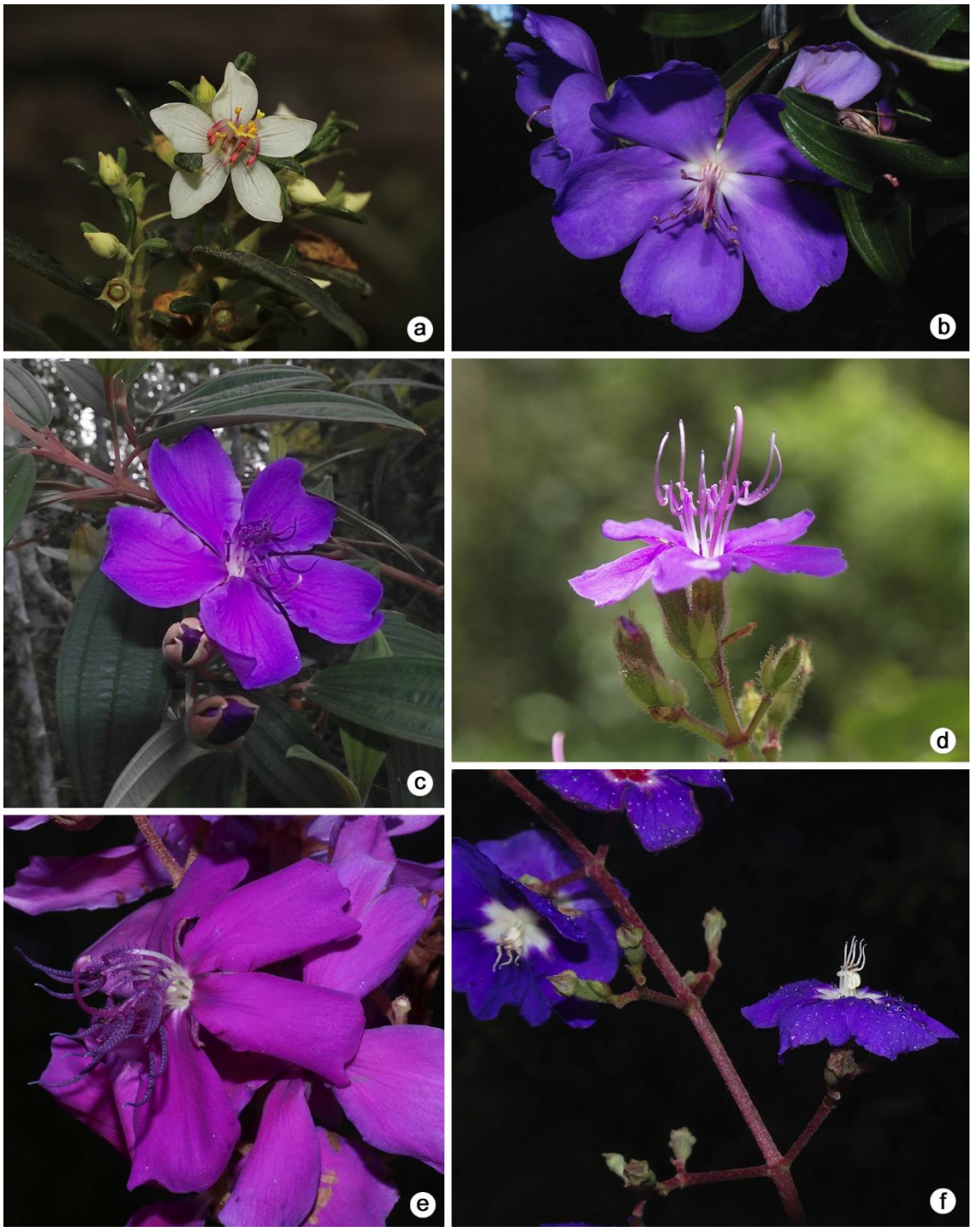

Figure 7.

Conclusões gerais

Foram amostradas 54 espécies no Parque Natural Municipal de São Lourenço (PNMSL), além de 2 espécies encontradas em matas próximas que podem ser possíveis ocorrências. As espécies encontradas são distribuídas em 10 gêneros, sendo eles *Aciotis* (1 sp.), *Acisanthera* (1 sp.), *Bertolonia* (1 sp.), *Chaetogastra* (1 sp.), *Henriettea* (1 sp.), *Meriania* (1 sp.) *Miconia* (42 spp.), *Microlicia* (1 sp.), *Mouriri* (1 sp.) e *Pleroma* (6 spp.).

Em termos comparativos com os demais trabalhos florísticos para Melastomataceae realizados no Espírito Santo, onde foram encontradas 57 espécies para a Estação Biológica de Santa Lúcia (EBSL), 39 para o Parque Estadual de Forno Grande e 26 para a Área de Proteção Ambiental de Mestre Álvaro, o PNMSL mostrou uma elevada riqueza de espécies, considerando o tamanho de seu fragmento florestal, o que corrobora com o observado por Thomaz & Monteiro (1997) a respeito da elevada diversidade botânica que ocorre no município. 33 espécies encontradas no PNMSL ocorrem na EBSL, 17 ocorrem na APAMA e 14 ocorrem no PEFG.

Em relação à lista de espécies presente no plano de manejo do parque, foram acrescentadas 29 espécies, considerando as espécies identificadas corretamente, sendo que destas, 17 foram coletadas pela primeira vez na região e o restante são novas identificações para espécimes que já haviam sido coletados, aumentando desta forma o conhecimento acerca da distribuição das espécies. Durante as expedições realizadas para este projeto, a espécie *Miconia cuneatissima* foi coletada pela primeira vez no estado do Espírito Santo e a espécie *Miconia dúbia* foi coletada pela primeira vez no município.

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